From:

Swope, Sheridan

Sent:

Friday, January 28, 2005 3:36 PM

To:

STIC-Biotech/ChemLib

Subject: 10/029,345

For 10/029,345, pls interference search only:

SID 108, residues 538-2532, against the NT data bases

SID 108, residues 538-1443, against the NT data bases

SID 108, full-length, oligo search (at least 1419 NTs), against the NT data bases

SID 109, full-length, against the NT & AA data bases

SID 109, residues 1-302, against the NT & AA data bases

SID 109, full-length, oligo search (at least 473 AAs), against the NT & AA data bases

Sheridan Swope, Ph.D.
Patent Examiner, AU 1652
Recombinant Enzymes
571-272-0943 (voice)
E02B71 Remsen Bld (Office)
E02C70 Remsen Bld (Mailbox)

109: 1/2-665 1/2-302 >473 5/1/2001



108: 538-2532 541-2532 558-1443 541-1443 >14-19



STAFF USE ONLY

Searcher:_____Searcher Phone: 2Date Searcher Picked up:____
Date Completed:____Searcher Prep/Rev. Time:___
Online Time:___

Type of Search	
NA Sequence: #	
AA Sequence :#	
Structure: #	
Bibliographic:	
Litigation:	
Patent Family:	
Other:	

44.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4
endors and cost where applicable
STN:
DIALOG:
QUESTEL/ORBIT:
LEXIS/NEXIS:
SEQUENCE SYSTEM:
WWW/Internet:
Other(Specify):

DECENZED

This Page Blank (uspto)

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  9::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
   1991.8
1991.8
1991.8
1986.2
294.6
106.8
1124.6
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
106.8
1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Issued_Patents_NA:*

1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*

2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*

3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*

4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*

5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*

6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-029-345A-108_COPY_538_2532
1995___536
1(a)ggcccatgagatgattgg......tggaaatcattgaggtctcf)1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1202784 segs, 818138359 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pebruary 15, 2005, 02:21:00; Search time 361.039 Seconds (without alignments) 9041.598 Million cell updates/sec
                                                                                                                                                                                                                                                                                                  Copyright
2344
2351
2351
2351
2351
279
279
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                              US-09-816-494-3
US-09-816-494-1
US-09-920-668-3
US-09-920-668-3
US-09-949-016-3250
US-09-916-434-91
US-09-513-999C-3684
US-09-513-999C-3684
US-09-922-146-3
US-09-922-146-3
US-09-922-146-3
US-09-922-146-3
US-09-922-146-3
US-09-923-655-347
US-09-949-016-2615
US-09-959-184-801
US-09-614-1248-801
US-09-589-184-804
US-09-614-1248-804
US-09-614-1248-804
US-09-614-1248-804
US-09-614-1248-804
US-09-618-804-804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUMMARIES
                              Sequence 1, Appli
Sequence 3250, Appli
Sequence 3250, Appli
Sequence 2877, Ap
Sequence 3684, Appli
Sequence 4617, Appli
Sequence 4617, Appli
Sequence 3, Appli
Sequence 2615, App
Sequence 2615, App
Sequence 801, App
Sequence 804, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Appli
Appli
```

	4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.	45	44	43	42	41	40	39	38	37	36	35	34	ω G	32	31	30	29	0
22222222222222222222222222222222222222	1238 4 US-09-736-457-803 Sequence 1238 4 US-09-614-124B-803 Sequence 1238 4 US-09-614-124B-803 Sequence 1238 4 US-09-671-325-803 Sequence 1238 4 US-09-658-824-803 Sequence 1238 4 US-09-702-705-825 Sequence 1244 4 US-09-614-124B-825 Sequence 1254 4 US-09-614-124B-825 Sequence 1254 4 US-09-614-124B-825 Sequence 1255 4 US-09-702-705-826 Sequence 1256 4 US-09-702-705-826 Sequence 1257 4 US-09-718-425-826 Sequence 1258 4 US-09-614-124B-826 Sequence 1258 4 US-09-614-826 Sequence 1258 4 US-09-614-826 Sequence	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	92	7.4
1238 4 US-09-736-457-803 1238 4 US-09-736-457-803 1238 4 US-09-671-325-803 1238 4 US-09-671-325-803 1238 4 US-09-658-824-803 1238 4 US-09-658-824-803 1238 4 US-09-658-824-803 1238 4 US-09-658-824-825 2064 4 US-09-736-457-825 2064 4 US-09-614-1248-825 2064 4 US-09-614-1248-825 2064 4 US-09-618-824-825 2064 4 US-09-618-824-826 2109 4 US-09-671-325-826 2109 4 US-09-614-1248-826 2109 4 US-09-618-826 2109 4 US-09-688-824-826	4 US-09-736-457-803 Sequence 4 US-09-614-124B-803 Sequence 4 US-09-671-325-803 Sequence 4 US-09-681-325-803 Sequence 4 US-09-658-824-803 Sequence 4 US-09-702-705-825 Sequence 4 US-09-736-457-825 Sequence 4 US-09-736-457-825 Sequence 4 US-09-614-124B-825 Sequence 4 US-09-614-124B-825 Sequence 4 US-09-6158-824-825 Sequence 4 US-09-6158-824-825 Sequence 4 US-09-6158-824-826 Sequence 4 US-09-736-457-826 Sequence 4 US-09-614-124B-826 Sequence 6 US-09-614-124B-826 Sequence 6 US-09-618-824-826 Sequence 6 US-09-618-824-826 Sequence	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	o
4. US-09-702-703-903 4. US-09-614-124B-803 4. US-09-611-325-803 4. US-09-658-184-803 4. US-09-658-824-803 4. US-09-658-824-803 4. US-09-614-124B-825 4. US-09-614-124B-825 4. US-09-614-124B-825 4. US-09-614-124B-825 4. US-09-614-124B-826	-09-736-457-803 -09-736-457-803 -09-671-325-803 -09-671-325-803 -09-658-824-803 -09-658-824-803 -09-671-325-825 -09-671-325-825 -09-671-325-825 -09-671-325-825 -09-671-325-825 -09-671-325-825 -09-688-824-825 -09-688-824-825 -09-614-248-825 -09-614-248-825 -09-628-824-825 -09-628-824-825 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-658-824-826 -09-658-824-826 -09-658-824-826 -09-658-824-826 -09-658-824-826	2109	2109	2109	2109	2109	2109	2064	2064	2064	2064	2064	2064	1238	1238	1238	1238	1238	T 2 3 0
US-09-614-124B-803 US-09-658-824-803 US-09-658-824-803 US-09-658-824-803 US-09-658-824-803 US-09-614-124B-825 US-09-614-124B-825 US-09-614-124B-825 US-09-614-124B-825 US-09-614-124B-826	-09-736-457-803 -09-736-457-803 -09-671-325-803 -09-671-325-803 -09-658-824-803 -09-658-824-803 -09-671-325-825 -09-671-325-825 -09-671-325-825 -09-671-325-825 -09-671-325-825 -09-671-325-825 -09-688-824-825 -09-688-824-825 -09-614-248-825 -09-614-248-825 -09-628-824-825 -09-628-824-825 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-638-824-826 -09-658-824-826 -09-658-824-826 -09-658-824-826 -09-658-824-826 -09-658-824-826	4.	4	4.	4	4	4	4	4	4	4	4	4	4	4	4	4.	4.	,e
		US-09-658-824-826	-09	-09	-09	US-09-736-457-826	US-09-702-705-826	US-09-658-824-825	US-09-589-184-825	US-09-671-325-825	US-09-614-124B-825	US-09-736-457-825	US-09-702-705-825	US-09-658-824-803	US-09-589-184-803	-09	-09	-09	05-09-702-703

ALIGNMENTS

Sequence 3, Application US/09816494 Patent No. 6664089 Patent No. 6664089 GENERAL INFORMATION: APPLICANT: Meyers, Rachel A. TITLE OF INVENTION: 38692 AND 21117, NOVEL DUF TITLE OF INVENTION: PHOSPHATASE MOLECULES AND FILE REFERENCE: 10448-030002 CURRENT APPLICATION NUMBER: US/09/816,494 CURRENT FILING DATE: 2001-03-23 PRIOR APPLICATION NUMBER: US 60/191,858 PRIOR FILING DATE: 2000-03-24 NUMBER OF SEQ ID NOS: 10 SOFTWARE: FASTSEQ for Windows Version 4.0 SEQ ID NO 3 LENGTH: 1998 TYPE: DNA ORGANISM: Homo sapiens RESULT 1 US-09-816-494-3 밁 Ş 밁 췽. 함 S 밁 S 당 Ś 밁 S US-09-816-494-3 Matches 1993; Conservative Best Query Match Local Similarity 301 241 121 361 301 241 181 181 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT 121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 61 61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC _ 1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAAGAGCTTCAACTCTGTTCACCTG GACTGTTTTCTCACTGCTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG ATGGCCCATGAGATGATTGGAAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA 99.8%; . Score 1991.8; Pred. No. 0; Mismatches DUAL SPECIFICITY AND USES THEREFOR DB 4; 2; Indels Length 1998; 0, Gaps

0

CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC 420

360 300

240 240 180 180 120 120 60

```
1321
                                                                                                                                   1261
                                                                                                                                                       1261
                                                                                                                                                                              1201
                                                                                                                                                                                                   1201
                                                                                                                                                                                                                         1141
                                                                                                                                                                                                                                               1141
                                                                                                                                                                                                                                                                      1081
                                                                                                                                                                                                                                                                                            1081
                                                                                                                                                                                                                                                                                                                   1021
                                                                                                                                                                                                                                                                                                                                        1021
                                                                                                                                                                                                                                                                                                                                                               961
                                                                                                                                                                                                                                                                                                                                                                                    961
                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                              GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCCAGGCCTTCAGACAGCCAG 1440
AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                          TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                 ĠATAĀĠĠĀĠĠĀĀĠĊĊĀĠĊĀŦĊĊĊĊĀĀĠĀĀĠĊŦĠĊĀĠĀĊĊĠĊĊĀĠĠĊĊŦŦĊĀĠĀĊĀĠĊĊĀĠ
                                                                                            AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAAACCAGTCCT
                                                                                                                                                                                                                                                              CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC 1140
                                                                              AAGCTATGCCAGTTCTCCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                      rctctegatateaateagriteatatieagecageategeageatecttacategetie
                                                                                                                                                                                   TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                  AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                               AGTGGGCTGCACCTGTCCGCAGACAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                         TGTGCCGACTCTGCTACCTCAGAGGCAGGAGGACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                     GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                     GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                   CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                           TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                               ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ĊAĠĊĀĠĀĀTĠĠĠĀTTĠĠŦŦĀTĠŦĠŦŦĀĀĀŦĠĊĊĀĠĊĀĀŦĀĊĊŦĠŦĊĊĀĀĀĠĊĊŦĠĀĊŦŦŦ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGCAGAATGGGATTGGTTATAGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAACGAGGAGCTGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAATTCTTCCCAATCTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
            1500
                                 1440
                                                                                                     1380
                                                                                                                            1320
                                                                                                                                                                      1260
                                                                                                                                                                                             1260
                                                                                                                                                                                                                                        1200
                                                                                                                                                1320
                                                                                                                                                                                                                   1200
                                                                                                                                                                                                                                                                                                           1080
                                                                                                                                                                                                                                                                                                                                                        1020
                                                                                                                                                                                                                                                                                                                                                                              1020
                                                                                                                                                                                                                                                                                                                                                                                                    960
                                                                                                                                                                                                                                                                                                                                                                                                                          960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
        Ś
                               맑
                                                 S
                                                                                                                         US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                              RESULT 2
US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                              吊
                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                        뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                           Query Match
Best Local Similarity
Matches 1993; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                               589
                                                                                                                                                                                                                                                                                                                                                                                                             1981
                                                                                                                                                                                                                                                                                                                                                                                                                                 1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1621
         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1441
                                                                          Conservative
```

Ó 문 Ş 문 Ş Ъ Ś 밁 Ś В Ś 밁 S 皮 S 片 ş 밁 S В Ś 밁 S 밁 Ş В Ś 밁 S 밁 δ 밁 Ś 밁 Ś

```
Sequence 1, Application US/09816494

Patent No. 6664089

GENERAL INFORMATION:

APPLICANT: Meyers, Rachel A.

TITLE OF INVENTION: 38692 AND 21117, NOVEL DUP

TITLE OF INVENTION: 98692 AND 21117, NOVEL DUP

TITLE OF INVENTION: 98692 AND 21117, NOVEL DUP

TITLE OF INVENTION: 98692 AND 21117, NOVEL DUP

TITLE REFERENCE: 10448-030002

CURRENT APPLICATION NUMBER: US/09/816,494

CURRENT FILING DATE: 2001-03-23

PRIOR APPLICATION NUMBER: US 60/191,858

PRIOR APPLICATION NUMBER: US 60/191,858

PRIOR FILING DATE: 2000-03-24

VUMBER OF SEQ ID NOS: 10

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 1

LENGTH: 3544

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

NAME/KEY: CDS

LOCATION: (589)...(2583)

US-99-816-494-1
AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                         ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCATTGAGGTCTCC 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGTCACGGGAAGAGCTGGGGAAAGTGGGCCAGTCAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCTACAGCTGCAGCTGCCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCGGATATCTTGGCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTCCACTCCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTCCACTGCATCGAAGTGGGAGCGTGGACGACAATTACCACACCAGCTTCCTTTTCGGC 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA 1500
                                                                                                                                                       99.8%;
                                                                                                                                       Score 1991.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DUAL
AND U
                                                                                                                                                                             띪
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    USES
                                                                                                                                     2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SPECIFICITY
JSES THEREFOR
                                                                                                                                                                           4;
                                                                                                                                       Indels
                                                                                                                                                                         Length
                                                                                                                                                                           3544;
                                                                                                                                   0;
                                                                                                                                   Gaps
                                                           648
                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1560
                                                                                                                                   0;
```

961 GAACCTGTCCCTGCTGTCTCAGAGGGTTGACAGAAAAGCGAGACGCCCCTCAGTCCACCC 1020	121 CACHTTTTGAMAGCGATTANTRATAGCCGGGCCATTTTGTGAMATACANTCC 708 122 CACHTTTGAMAGCGATTANTRATAGCGGGCCCATTTTGTGAMATACANTCC 708 123 CACHTTTGAMAGCGATTANTRATAGCACCTTCCAAGCTTATGAMAGCGAMAGTTGAAAGG 124 CACHTTTGAMAGCGATTANTRATAGAACTGCCAAGCTTATGAMAGCGAMAGTTGAAAGG 125 CACHATTTTGAMAGCGATTAATTACAAAGCTCCAAAGCTCCAAAAATTGAACTTGAACTTGAT 126 CACHATTTTGAAAAGCTTCAATTACAAAGCTCCAAAAGAACTTAAAAGAACTTCAACTTGAT 127 CAAGTCAAAAAGTTTAATTACAAAAGAACTTCAAAAGAACTTCAACAAAAATTAAAACCTGAAAAAAATTAAACCTGAAAAAATTAAACCTGAAAAAATTAAACCTGAAAAAATTAAACCTGAACTTTAAATTACAAACTTCAAAAAAAA
RESULT 3 US-09-920-668-3 i Sequence 3, Application US/09920668 i Sequence 3, Application US/09920668 i Patent No. 6482644 i GENERAL INFORMATION: i APPLICANT: Brett P. Monia i TITLE OF INVENTION: ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 8 EXPRESSION i FILE REFERENCE: RTS-0246 i CURRENT APPLICATION UM/BER: US/09/920,668 i CURRENT FILING DATE: 2001-08-01 i NUMBER OF SEQ ID NOS: 49 i LENGTH: 2377 i TYPE: DNA	OY 1201 TCTCTGGATATCAANTCAATTCACCAGCAGCATTCGGATCCTTTACATTCGCTTC 1360 1799 TCCTCGATATCAANACCAGTTCATATTCACACCAGCATTCGGATCCTTCAATTCCTTTC 1348 1799 TCCTCGATATCAANACCAGTTCCATATTCACAAACCTTCCATCCTTCAATCCTTCAATCCCTTC 1349 1849 TCCTCATCACAAGATCCTTTCAATACAAACCTTCCAATCCTTCAATCCTCTCAATCCCTTCAATCCAATCCCTCCAAAACCTTCAAAACCTCAAAAACCTCAAAAACCTCAAAAACCTCAAAAACCTCAAAAACCTCAAAAACCTCAAAAACCTCAAAAACCTCAAAAACCTCAAAAACCTCAAAAACCTCAAAAACCTCAAAAACCTCAAAAACCTCAAAAACCTCAAAAACCTCAAAAACCTCAAAAACCTCAAAAAA

8 8 8 8 8 8 8

Ş

음 성 음

중 음

```
S
                                                                                                                                               밁
                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                          닭
                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ᅜ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-920-668-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 19.4%;
Best Local Similarity 59.9%;
Matches 716; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: HOMO FEATURE: NAME/KEY: CDS LOCATION: (135)
                                                                                                                                                           1005
                                                                                                                                                                                                                                                                       945
                                                                                                                                                                                                                                                                                                                             805
                                                                                                                                                                                                                                                                                                                                                                                         885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              685
                                                                                                                                                                                                                                                                                                                                                                                                                                            745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    765
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        28
                                                                                а в с да де се поста се по в поста в 
                                                                                                                                                                                      GGCCAACTCCTGGACTATGAGAAGAAGATTAAGAACCAGACTGGAGCATCAGGGCCAAAG
                                                                                                                                                                                                                                                     GACGCTACAGGTTCGTGAAGGACAGGCGCCCGTCCATCTCGCCCAACTTCAACTTCCTG
                                                                                                                                                                                                                                                                                            GAAGCTTACAGATTTGTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTGCCGTGGTTGGACAAATCAGTAGAT
                                                                                                                                                                                                                                                                                                                                                                    recegerergecatecaregecaregeciacareaagaaccaregecarereceae
                                                                                                                                                                                                                                                                                                                                                                                                        TCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTTTAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Treategataaageceaagereteeagergecaagreategreeacitgretegecate
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCAACGCCAGCAACTCCTGCCCCAAGCCTGACTTCATCTGCGAGAGCCGCTTCATGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCATTTCCTGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCTCGCAGAAGGACGTCCTAAACAAGGATCTGATGACGCAAAATGGAATAAGCTACGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCTGCCAGCAGATGTCCTCAACAAGGAGCTGATACAGCAGAATGGGATTGGTTATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGCCTTGCTTACCTGTTGCCAACATTGGGGCCAACCCGAATTCTTCCCAATCTTTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rcerderrecedecercies de la recensión de la rece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           caeccreccreccrerecciaeceresecreacccearccreaccreaccreraccre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGTTGTTTCCCTGGCCTCTGTGAAGGAAAAATCCACT---CTAGTCCCTACCTGCATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAAAGCTCCCAAGATGTTGCCTCTCTCTCTAGACTGTTTTCTCACTGTACTTCTGGGT 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCTGGACGGCTTCGACAGCGTGGCCATCCTCACTGGGGGCTTCGCCACCTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCAGGTGGGTTTGCTGAGGTTCTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGAGCACGCGGGACGCCAGCGTGCTGGCCGCAGACAGCTTCCTCTCCATCCTGGTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ĊAĠĊCGGĊTĠĊACGCAGCCAĠĠTGĠĀGGCTACGGAGCCACAĠGĀCĠTGĠTGĠTCTĀTĠĀC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCTCCAAGCTGGTGAAGCGGCGGCTGCAGCAGCAGGGCAAGCTTGCGGAGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACAGCCGCTCCTTCGTGGAGTACAACAGCTGGCATGTGCTCAGCTCCGTCAACATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATAGCCGGCCATTTGTGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAAAGTGGAACGGAAAAAGTGCTGCTAATT 87
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (135)...(2012)
                             --CCCCCTCAGGGACGCCGGAGCCTCCGCCCAGTCCTGCCGCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 387.8; DB 4;
Pred. No. 2.6e-119;
0; Mismatches 452;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                   984
                                                                                                                                                                                                                                                        1004
                                                                                                                                                                                                                                                                                                                 864
                                                                                                                                                                                                                                                                                                                                                                                                                             804
                                                                                                                                                                                                  924
                                                                                                                                                                                                                                                                                                                                                                       944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                224
                                                  Ś
                                                                                                        밁
                                                                                                                                               S
                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                멁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local :
                                                  388
                                                                                                                                                           328
                                                                                                                                                                                                                       379
                                                                                                                                                                                                                                                                          268
                                                                                                                                                                                                                                                                                                                                   319
                                                                                                                                                                                                                                                                                                                                                                                         208
                                                                                                                                                                                                                                                                                                                                                                                                                                                  259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       88
CGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCACT---CTAGTCCCTACCTGCATTTCT
```

```
APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
PRIOR REPLICATION NUMBER: 60/231,498
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08

NUMBER: 2000-09-08

NUMBER: 2000-09-08

NUMBER: 2000-09-08

NUMBER: 2000-010-20

PRIOR APPLICATION NUMBER: 60/231,498
PRIOR APPLICATION NUMBE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 4
US-09-949-016-3250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: VENTER, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 3250, Application Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
mes 715; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28 ATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAAAGTGGAAACGGAAAAAGTGCTAATT 87
AAGCTGGACGGCTTCGACAGCGTGGCCATCCTCACTGGGGGCTTCGCCACCTTCTCC
                                                     AAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCAGGTGGGTTTGCTGAAGTTCTCT
                                                                                                                                                     CAGAGCACGCGGGACGCCAGCGTGCTGGCCGCAGACAGCTTCCTCCTCCATCCTGAGC
                                                                                                                                                                                                           CAAAGCTCCCAAGATGTTGCCTCTCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGT
                                                                                                                                                                                                                                                                                                                  CAGCCGGCTGCACGCAGCCAGGTGGAGGCTACGGAGCCACAGGACGTGGTGTATGAC
                                                                                                                                                                                                                                                                                                                                                                                         CAGCATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCTCCAAGCTGGTGAAGCGGCGGCTGCAGCAGGGCAAGGTGACCATTGCGGAGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACAGCCGCTCCTTCGTGGAGTACAACAGCTGGCATGTGCTCAGCTCCGTCAACATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATAGCCGGCCATTTGTGGAATACAATACATCCCCACATTTTTGGAAGCCATTAATATCAAC 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cecciecaedacactaacceccicaaececicciicciccciedacaicaicicie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACGCCCCCGGCGACCAGCAGCAGCAGGGCCTGCGCGGCCTGCACCTCTCCTCGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGCAGGACAAAAGGCCCGTGCATCCCGCCGAGCGTGCCCAGCGTGCCCAGCGTGCCCAGCCGTGCAGCCG 1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCCCGCTGCCACGGCTGCCACCTACCTCAGAGAGCGCTGCCACAGGGAATGCGGCT 1172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -----CAGGGAGGGCGCCTGAGCGCGGGCGGGAGCCCCCCGCGCCCCCC 1220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/09949016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 386.2; DB 4;
Pred. No. 9.1e-119;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches 453;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ASSOCIATED
OF DETECTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2351;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
    498
                                                                                                                                                         438
                                                                                                                                                                                                                                    327
                                                                                                                                                                                                                                                                                                                                                                                                 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       207
                                                                                                                                                                                                                                                                                                                  378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1164
```

```
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Duclert, A.
APPLICANT: Discrete, A.
TITLE OF INVENTION: Expressed Sequence Tags and Enc.
Patent No. 6783961
PATENT REFERENCE: 59. US2.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT PILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR PILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
SOPTWARE: Patent.pm
SEQ ID NO 2877
                                                                                                                                                                                                                                          RESULT 5
US-09-513-999C-2877
                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                               Sequence 2877, Application US/09513999C Patent No. 6783961 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                       1165
                                                                                                                                                                                                                                                                                                                                                                   1195
                                                                                                                                                                                                                                                                                                                                                                                                                               1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             499
                                                                                                                                                                                                                                                                                                                          TCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAGCAGGACAAAGGCCCGTGCATCCCGCCGCGTGCCCAGCGTGCCCAGCGTGCAGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAAGCTTACAGATTTGTGAAAGAAAAAAGACCTACTATATCTCCGAAACTTCAATTTTCTG
                                                                                                                                                                                                                                                                                                         CGCCTGCAGGACACTAACCGCCTCAAGCGCTCCTTCTCCCTGGACATCAAGTCTG
                                                                                                                                                                                                                                                                                                                                                                   ACGCCCCCGGCGACCAGCGCACTGCAGCAGGGCCTGCGCCTGCACCTCTCCTCGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                               GC-----CAGGGAGGGCGGCCTGAGCGCGGGGGGGAGCCCCCCGGGCCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCCCCGCTGCCACGGCTGCCACCACCTACCTCAGAGAGCGCTGCCACAGGGAATGCGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCCTGTGCCGACTCTGCTACCTCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCA-----CCCCCTCAGGGACGCCGGAGCCTCCGCCCAGTCCTGCCGCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAATGAACCTGTCCCTGCTGTCTCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGCCAGCTGCTGGAGTACGAGCGCAGCCTGAAGCTGCTGGCCGCCCTGCAGGGCGACCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCCAACTCCTGGACTATGAGAAGAAGATTAAGAACCAGACTGGAGCATCAGGGCCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACGCCTACAGGTTCGTGAAGGACAGGCGCCCGTCCATCTCGCCCCAACTTCAACTTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCCGCTCTGCCACCATCGCCATCGCCTACATCATGAAGACCATGGGCATGTCCTCCGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCCGCTCCGCCATCGTTATCGCCTACATCATGAAGAGAGGATGGACATGTCTTTAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTCAACGCCAGCAACTCCTGCCCCAAGCCTGACTTCATCTGCGAGAGCCGCTTCATGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCATTTCCTGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCTCGCAGAAGGACGTCCTAAACAAGGATCTGATGACGCAAAATGGAATAAGCTACGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAGCAGAATGGGATTGGTTATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGCCCTGCCTGTGCCCAGCGTGGGCCTGACCCGCATCCTGCCTCACCTCTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCGAATTCTTCCCCAATCTTTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCTGCTTCCCCGGCCTCTGCGAGGGCAAGCCTGCTGCCCTGCTACCCATGAGCCTCTCC
                                                                                                                                      Encoded Human Proteins
                                                                                                                                                                                                                                                                                                                                     1219
                                                                                                                                                                                                                                                                                                         1309
                                                                                                                                                                                                                                                                                                                                                                                                1164
                                                                                                                                                                                                                                                                                                                                                                                                                               1194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           558
                                                                                                                                                                                                                                                                                                                                                                   1254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   564
```

RESULT 6 US-09-016-434-91

Sequence 91, Application US/09016434
Patent No. 6500938
GENERAL INFORMATION:
APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION

FOR

THE DETECTION OF SIGNALING

```
S
                                                                                                  밁
                                                                                                                         8
                                                                                                                                                                         5
                                                                                                                                                                                                                             8
                    5
                                                밁
                                                                                                                                                     닭
                                                                                                                                                                                                       片
                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                               ई
                                                                                                                                                                                                                                                                                                                                                             ; LOCATION: 37
; OTHER INFORMATION:
US-09-513-999C-2877
                                                                                                                                                                                                                                                                                                            Best Local Sin Matches 326;
                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: misc_feature
LOCATION: 237
OTHER INFORMATION: w=a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc_feature
LOCATION: 17
OTHER INFORMATION: h=a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PEATURE: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 19
OTHER INFORMATION:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: 18
OTHER INFORMATION: y=c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM: Homo FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: UNSURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION: n=a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc_feature
LOCATION: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc_feature
LOCATION: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: CDS
LOCATION: 127..333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OCATION:
                                                                                                                                                                                                                                                                                                                        Local Similarity
                        332
                                                 239
                                                                                                    179
299
                                                                         272
                                                                                                                            212
                                                                                                                                                     119
                                                                                                                                                                             152
                                                                                                                                                                                                        59
                                                                                                                                                                                                                                 93
                                                                                                                                                                                                                                                                        34 ACTGAGAGGTTGGTGGCTCTGCTGGAAAGTGGAACGG-AAAAAGTGCTGCTAATTGATAG
                                                                                                                                                                    CCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGC
                                                                                                                                                                                                                    CCGGCCATTIGTGGAATA-CAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCT
            TGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCA
                                                 GCTCCCAAGATGTTGCCTCTCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGTAAAC
                                                                                                                 ATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAA
                                                                         GCTCCCAAGATGTTGCCTCTCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGTAAAC
                                                                                                                                                                                                                                                           ACTGAGAGGTTGGTGGHY---KCTGGAAAGTGGAACGGNAAAAAGTGCTGCTAATTGATAR
                                                                                                    ATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAWA
                                                                                                                                                     CCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGC
                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 k=g
                                                                                                                                                                                                                                                                                                                                                                           Xaa=His
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                r=a
                                                                                                                                                                                                                                                                                                                       14.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ဝူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ი
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    đ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                           ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        e
                                                                                                                                                                                                                                                                                                          Score 294.6; DB 4
Pred. No. 1.6e-88;
5; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                           Gln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ď
                                                                                                                                                                                                                                                                                                                                  DB 4;
                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                          4:
                                                                                                                                                                                                                                                                                                          Gaps
```

58 151 92

TITLE OF INVENTION: NUMBER OF SEQUENCES:

PATHWAY GENE

EXPRESSION

```
RESULT 7
US-09-513-999C-3684/c
                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-016-434-91
TITLE OF INVENTION: Expressed Sequence Tags and Patent No. 6783961
FILE REFERENCE: 59.US2.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
                                                                                                                       Patent No. 6783961
GENERAL INFORMATION:
                                                                                                                                        Sequence 3684, Application US/09513999C
Patent No. 6783961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/016.474

CLASSITETC: HEREWITE.

CURASING SYSTEM: PC-DOS/MS-DOS

SOFTMARR: Word Perfect 6.1 for Windows/MS-DOS

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/016.474

CLASSITETCE: HEREWITE.
                                                                     APPLICANT: Dumas Milne Edwards, APPLICANT: Duclert, A. APPLICANT: Giordano, J.Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (650) 845-4166 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IMMEDIATE SOURCE:
LIBRARY: LUNGFET03
CLONE: 1234795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE CHARACTERISTICS:
LENGTH: 279 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TELEPHONE: (650) 855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: PALO ALTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET:
                                                                                                                                                                                                                                                 205
                                                                                                                                                                                                                                                                     181 GAÇAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAAC 223
                                                                                                                                                                                                                                                                                                                145
                                                                                                                                                                                                                                                                                                                           121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     223;
                                                                                                                                                                                                                                                                                                                                                                                  85
                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                  25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    -
                                                                                                                                                                                                                                      GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAAC 247
                                                                                                                                                                                                                                                                                                       CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                  AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTGGAAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCCCATGAGATGGAACTCAAATTGTTACTGAGAGGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               11.2%; Score 223; DB 4; ilarity 100.0%; Pred. No. 2.2e-64; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          91:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PA-0002 US
                                                   Encoded Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 279;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ٥,
                                                                                                                                                                                                                                                                                                                                                                           144
                                                                                                                                                                                                                                                                                                                                                                                                                                           84
```

```
á
       F
                                                               닭
                                                                                        Ś
                                                                                                                        밁
                                                                                                                                                  S
                                                                                                                                                                                                                                             US-09-557-921-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-557-921-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: k=g
US-09-513-999C-3684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT FILING DATE: 2000-02-2
PRIOR APPLICATION NUMBER: US 60
PRIOR FILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 3684
LENGTH: 378
                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY PHOSPHATASE FILE REFERENCE: 200125,416 CURRENT APPLICATION NUMBER: US/09/557,921 CURRENT FILING DATE: 2000-04-20 NUMBER OF SEQ ID NOS: 20 SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 1
                                                                                                                                                                                 Matches
                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 1, Application US/09557921
Patent No. 6551810
                                                                                                                                                                                                                                                      LENGTH: 1830
TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Luche, R
APPLICANT: Wei, Bo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
NAME/KEY: CDS
LOCATION: 216..377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
NAME/KEY: misc_feature
LOCATION: 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                              Local Similarity 56.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local
461 TTGCCAACATTGGGCCAACCCGAATCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATG
                                                                                    521 TCTCAACAAGGAGCTGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           198
                                                                                                                                                                                   251;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          104 TGGAATACATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGA 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 378 TGGTGGCTCTGCTGSAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               189;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        44 TGGTGGCTCTGCTGGAAAGTGGAAAAAAGTGCTGCTAATTGATAGCCGGCCATTTG
                        CCTGTCCAAAGCCTGACTTT---ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATG
                                                      CTCAGGÁCCTGGÁCACCATGCÁGCGGCTGAACATCGGCTACGTCATCAACGTCÁCCACTC 1155
                                                                                                                 TCGAGAACGCTGAGCTCACCCCCATCTTGCCCTTCCTGTTCCTTGGCAATGAGCAGGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAAC 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATAAGGTAAAC 188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATAAGGTTGAC 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGA
                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                       Ralf M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2000-02-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     o
H
                                                                                                                                                                                0
                                                                                                                                                                             Score 124.6; DB 4
Pred. No. 1.7e-30;
0; Mismatches 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60/122,487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 187.8; DB 4
Pred. No. 2.2e-52;
0; Mismatches 2
                                                                                                                                                                                                         DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 4;
                                                                                                                                                                              189;
                                                                                                                                                                              Indels
                                                                                                                                                                                                          Length 1830;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 378;
                                                                                                                                                                             3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
1215
                                                                                       580
                                                                                                                                               520
                            637
                                                                                                                 1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           103
                                                                                                                                                                           1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

```
밁
                                                                                           S
                                                                                                                                     문
                                                                                                                                                                হ
                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                            হ
                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: DNA
; ORGANISM: Human
US-09-949-016-4617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILE REFERENCE: CL001307

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR FILING DATE: 2000-10-20

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR FILING DATE: 2000-10-03

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR PILING DATE: 2000-09-08

PRIOR PILING DATE: 2000-09-08

PRIOR PILING DATE: 2000-09-08

PRIOR PILING DATE: 2000-09-08

PRIOR PILING DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 9
US-09-949-016-4617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 4617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: VENTER, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 4617, Ap
Patent No. 681233
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 2283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1216
                                                                                                                                                                                                                     843
                                                                                                                                                                                                                                                                                                                                      535
                        772
                                                                                                                                         903
                                                                                                                                                                                652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      818
                                                            963
                                                                                                                                                                                                                                                                                                                                                                                                                                                    229; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           638
TTCGAGAAGAATGGTGACTTTCACTACAAGCAGATCCCCATCTCCGACCACTGGAGCCAG
                                                                                                                                                                                                                                                                                                AGCCTGGCCAAACTGGGCATCCGCTACATCCTCAATGTCACCCCCAACCTCCCAAACTTC
                                                                                                                                                                                                                                                                                                                                    CTGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAA----G 591
                                                                                                                                                                                                                                                                                                                                                                                                                 CCAACCCGAATTCTTCCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAG 534
                                                                                                                                                                        AAAATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAAT
                                                                                                                                                                                                                                                         CCTGACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAG
                                                                                                                                                                                                                                                                                                                                                                           CCTGTCCAGATCCTGCCCAACCTCTATCTGGGCAGTGCCCGGGATTCCGCCAATTTGGAG
                                                            TGCGGGGTGCTCGTCCACTGCTTGGCGGGGGGTCAGCCGTTCTGTCACCGTCACTGTGGCC
                                                                                               GGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCC
                                                                                                                                       AACCTGTCGCGGTTCTTTCCGGAGGCCATTGAGTTCATTGATGAGGCCTTGTCCCCAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTTCGAGGAAGACCTAAACAAC 1478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCATCGCTATCGCCTACATCATGAAGAGGGATGGACATGTCTTTAGATGAAGCTTACAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGTCAAAGGCAAACGACCAATTATCTCCCCAAACCTTAACTTCATGGGGCAGTTGCTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCATCGTCATCGCTTACTTGATGAAGCACACTCGGATGACCATGACTGATGCTTATAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTCACCAGTGTGGGAAGGGGCTTCTCATCCACTGCCAGGCTGGGGGTGTCCCGCTCCGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAGCAACAAGCAGAACCTGCGGCAGTACTTTGAAGAGGCTTTTGAGTTCATTGAGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGCTTTTGTGAGAAAATTTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/09949016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      55.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 106.8; DB 4;
Pred. No. 2.1e-24;
0; Mismatches 182;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2283;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      u
T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       THEREOF
                                                            1022
                                                                                                                                                                                                                   902
                                                                                                                                                                                                                                                                                                842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1275
                                                                                                                                         962
                                                                                                                                                                                                                                                         651
                                                                                                                                                                                                                                                                                                                                                                           782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         697
```

```
RESULT 11
US-09-016-434-1135
; Sequence 1135, Applicat
; Patent No. 6500938
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 48

SEQ ID NO 3
LENGTH: 2303
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                  ঠ
                                                                                                                                                                                           밁
                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                        ક
                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 10
US-09-922-146-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-922-146-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 3, Application US/09922146
PATENT NO. 6566133
GENERAL INFORMATION:
APPLICANT: Lex M. Cowsert
APPLICANT: Brett P. Monia
TITLE OF INVENTION: ANTISENSE MODULATION OF
FILE REFERENCE: RTS-0252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 229; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/922,146
CURRENT FILING DATE: 2001-08-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: CDS
LOCATION: (114)...(1268)
                                                                                                                         1083
                                                                                                                                                                                             1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1023
                                                                                                                                                           832
                                                                                                                                                                                                                               772
                                                                                                                                                                                                                                                               963
                                                                                                                                                                                                                                                                                               712
                                                                                                                                                                                                                                                                                                                                   903
                                                                                                                                                                                                                                                                                                                                                                   652
                                                                                                                                                                                                                                                                                                                                                                                                     843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  475 CCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGATACAGCAGAATGGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAA----G
                                                                                                                                                                                                                                                                                               GGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                     ccreactratcccceaercreatriccrecerereccreteaareacaectricae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTGTCCAGATCCTGCCCAACCTCTATCTGGGCAGTGCCCGGGATTCCGCCAATTTGGAG
                                                                                                                           AAGTCTAACATCTCCCCCAACTTCAACTTCATGGGGCAGTTGCTGGACTTTGAG
                                                                                                                                                                                                                                                               TGCGGGGTGCTCCACTGCTTGGCGGGGGTCAGCCGTTCTGTCACCGTCACTGTGGCC
                                                                                                                                                                                                                                                                                                                                                                 AAAATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAAGCCTCCAAT 711
                                                                                                                                                                                                                                                                                                                                                                                                     TTCGAGAAGAATGGTGACTTTCACTACAAGCAGATCCCCATCTCCGACCACTGGAGCCAG
                                                                                                                                                    AGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAG
                                                                                                                                                                                           TACCTCATGCAGAAGCTCCACCTCTCTCTCAACGATGCCTATGACCTGGTCAAGAGGAAG
                                                                                                                                                                                                                           AGCCTGGCCAAACTGGGCATCCGCTACATCCTCAATGTCACCCCCAACCTCCCAAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGTCTAACATCTCCCCCAACTTCAACTTCATGGGGCAGTTGCTGGACTTTGAG 1136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGACCTACTATATCTCCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TACCTCATGCAGAAGCTCCACCTCTCTCTCAACGATGCCTATGACCTGGTCAAGAGGAAG
                                                                                                                                                                                                                                                                                                                                 AACCTGTCGCGGTTCTTTCCGGAGGCCATTGAGTTCATTGATGAGGCCTTGTCCCAGAAC
                                     Application US/09016434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             55.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 106.8; DB 4;
Pred. No. 2.1e-24;
0; Mismatches 182;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DUAL SPECIFIC PHOSPHATASE 9 EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2303;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           υ
'
                                                                                                                         1136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                           885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     885
                                                                                                                                                                                                                             831
                                                                                                                                                                                             1082
                                                                                                                                                                                                                                                                                               771
                                                                                                                                                                                                                                                                                                                                   962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        842
                                                                                                                                                                                                                                                               1022
                                                                                                                                                                                                                                                                                                                                                                                                                                      651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1082
```

APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION
TITLE OF INVENTION: PATHWAY GENE EXPRESSION

ę

SIGNALING

NUMBER OF SEQUENCES: CORRESPONDENCE ADDRESSE INCYTE P

INCYTE PHARMACEUTICALS, INC

```
RESULT 12
US-09-023-655-946
; Sequence 946, Application US/09023655
; Patent No. 6607879
                                                                                                                                            8
                                                                                                                                                                                       밁
                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                  뮍
                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-016-434-1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity 53.0
222; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0
TELECOMMUNICATION INFORMATION:
TELECHONE: (650) 855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS: LENGTH: 2109 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: ISM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS
CURRENT APPLICATION DATA;
APPLICATION NUMBER: US/09/016,434
FILING DATE: HEREWITH
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IMMEDIATE SOURCE:
LIBRARY: GENBANK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLONE: g1418933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                            1219
                                                                                                                                                                                                                                                                                                                          1159 CAGTTTTTCCCTGAGGCCATTTCTTTCATAGATGAAGCCCGGGGCAAGAACTGTGGTGTC
                                                                                                                                                                                                                                                                                                                                                                                                1099 GCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGGAGCCAAAACCTGTCC 1158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1039
                                                                                                                                                  841
                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         544 CAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGC---CTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               484 ATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG
                                                                                                      ATATOCOCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAGAGGACGCT 1391
                                                                                                                                          ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAT 893
                                                                                                                                                                            CAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAAATGAAAAATCCAAC
                                                                                                                                                                                                                                                                                    cragigeacretriagergegarerecececicecaecaregeraregeeracareare
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94304
                                                                                                                                                                                                                                                      TTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACTGTGGCTTACCTTATG
                                                                                                                                                                                                                                                                                                                                                            CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAATTCGGCATCAAGTACATCTTGAACGTCACCCCCAATTTGCCGAATCTCTTTGAGAAC 1098
                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCTTGCCCTTCCTACTTGGGCTGTGCCAAAGACTCCACCAACTTGGACGTGTTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PALO ALTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (650)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1135:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PA-0002 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 96.2; DB 4; Length 2109; Pred. No. 7.6e-21; 0; Mismatches 188; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ω
-
                                                                                                                                                                                                                                                                                        780
                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                      1278
                                                                                                                                                                                                                                                                                                                            1218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1038
```

```
Ş
                                                                    밁
                                                                                               S
                                                                                                                                   밁
                                                                                                                                                                S
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-023-655-946
                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                Matches 222;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (650) 845-4166 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION: APPLICANT: Cocks,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IMMEDIATE SOURCE:
LIBRARY: GENBA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,655
FILING DATE: HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 2109 base pair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLASSIFICATION: PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: PA
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 855-0555
TELEFAX: (650) 845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: COMPOSITION TITLE OF INVENTION: EXPRESSION NUMBER OF SEQUENCES: 1508
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
TOPOLOGY: lir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE:
CLASSIFICATI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: INCYTE PHARMACEUTICALS, STREET: 3174 PORTER DRIVE
                                                                  1219
                                                                                                                                   1159
                                                                                                                                                                                                  1099
                                                                                                                                                                                                                                                          1039 GAATTCGGCATCAAGTACATCTTGAACGTCACCCCCAATTTGCCGAATCTCTTTGAGAAC 1098
                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                979
                                                                                                                                                                                                                                                                                           544 CAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGC---CTGACTTT
                                                                                                                                                                                                                                                                                                                                                        484 ATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG
                         CAGTTTTTCCCTGÁGGCCATTTCTTTCÁTAGÁTGÁÁGCCCGGGGCAAGÁACTGTGGTGTC
                                                                                                                                                                                             GCAGGAGAGTTTAAATACAAGCAAATCCCCCATCTCGGATCACTGGAGCCAAAACCTGTCC 1158
                                                                                                                                                                                                                            ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PALO ALTO
CALIFORNIA
CAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAAATGAAAAAATCCAAC 1338
                                                                                             CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG 780
                                                                                                                                                           CCGTGGTTGGACAATCAGTAGATTTCATTGAGAAAGCAAAAAGCCTCCAATGGATGTGTT 720
                                                                                                                                                                                                                                                                                                                          ATCTTGCCCTTCCTACTTGGGCTGTGCCAAAGACTCCACCAACTTGGACGTGTTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              g1418933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENBANK
                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Susan G. St
Jeffrey J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cocks, Benjamin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            single
                                                                                                                                                                                                                                                                                                                                                                                                             4.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  . Stuart
J. Seilhamer
COMPOSITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        37,071
                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                           Score 96.2; DB 4;
Pred. No. 7.6e-21;
0; Mismatches 188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>۾</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PA-0001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FOR THE DETECTION OF BLOOD CELL GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SD
                                                                                                                                                                                                                                                                                                                                                                                                                         Length 2109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6
2
                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                            ω
-
                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                               1278
                                                                                                                              1218
                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                             1038
                                                                                                                                                                                                                                                                                                                                                            543
                                                                                                                                                                                                                                                                                                                                                                                           1;
```

```
APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

FILE REFERENCE: CLOO1307

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR FILING DATE: 2000-10-20

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-09-08

PRIOR FILING DATE: 2000-09-08

INUMBER OF SEQ ID NOS: 207012

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 2615

LENGTH: 2475

TYPE: DNA

ORGANISM: Human

US-09-949-016-2615
Bequency
Patent No. 660/o/
Patent No. 660/o/
GENERAL INFORMATION:
APPLICANT: Cocks, Benjamin G.
APPLICANT: Susan G. Stuart
APPLICANT: Jeffrey J. Seilhamer
APPLICANT: Jeffrey J. Seilhamer
COMPOSITION FC
TTTLE OF INVENTION: EXPRESSION
                                                                                                                                                                                           RESULT 14
US-09-023-655-347
                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 13
US-09-949-016-2615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                     Sequence 347, Application US/09023655 Patent No. 6607879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2615, Application US/09949016 Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity hes 222; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1128 GAATTCGGCATCAAGTACATCTTGAACGTCACCCCCAATTTGCCGAATCTCTTTGAGAAC 1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1068 ATCTTGCCCTTCCTACTTGGGCTGTGCCAAAGACTCCACCAACTTGGACGTGTTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            544 CAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGC---CTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                484 ATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG 543
                                                                                                                                                                                                                                                                                                             ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAT 893
                                                                                                                                                                                                                                                                                                                                                                       CAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAAATGAAAAAATCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACTGTGGCTTACCTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGGAGCCAAAACCTGTCC
                                                                                                                                                                                                                                                                                                                                                                                                             CAGTTTTTCCCTGAGGCCATTTCTTTCATAGATGAAGCCCGGGGCAAGAACTGTGGTGTC 1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAT
                                                                                                                                                                                                                                                                                  ATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAGAGGACGCT 1480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAGAGGACGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.8%;
llarity 53.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 96.2; DB 4; Length 2475; Pred. No. 8.7e-21; 0; Mismatches 188; Indels 3
                                            FOR
                                            THE DETECTION OF BLOOD CELL GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           893
                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                         APPLICANT:
                                                                                                           APPLICANT:
                                                                APPLICANT:
                                              APPLICANT:
```

```
RESULT 15
US-09-702-705-801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-023-655-347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (650, ...
TELEFAX: (650, ...
INFORMATION FOR SEQ ID NO: 347
SEQUENCE CHARACTERISTICS:
SEQUENCE CHARACTERISTICS:
1.FNGTH: 1208 base pairs
                                                                                          GENERAL
                                                                                                        Sequence 801, Application US/09702705 Patent No. 6504010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                    APPLICANT:
                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-(
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 855-0555
TELEPAX: (650) 845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: 31/3 CITY: PALO ALTO CITY: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,655
FILING DATE: HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LIBRARY: THYRN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ZIP: 94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                          INFORMATION:
                                                                                                                                                                                                                   184
                                                                                                                                                                                                                                                    860 TTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 900
                                                                                                                                                                                                                                                                                     124
                                                                                                                                                                                                                                                                                                             800 TAGATGAAGCTTACAGATTTGTGAAAGAAAAAAAGACCTACTATATCTCCCAAACTTCAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  680 TAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    142;
                                                                                                                                                                                                                                                                                                                                                                                            740 GGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTT 799
                                                                                                                                                                                                                                                                                                                                                           64 GGGTGTCCCGCTCCGCCACCATCGTCATCGCTTACTTGATGAAGCACACTCGGATGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                4 TTGAGTTCATTGAGGAAGCTCACCAGTGTGGGAAGGGGGCTTCTCATCCACTGCCAGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1444245
                                                                                                                                                                                                               TCATGGGGCAGTTGCTAGAGTTCGAGGAAGACCTAAACAAC
                                                                                                                                                                                                                                                                                     TGACTGATGCTTATAAATTTGTCAAAGGCAAACGACCAATTATCTCCCCCAAACCTTAACT
Fanger, Gary
Vedvick, Tom
                                    Bangur, Chaitanya
Lodes, Michael A.
                                                                       Wang, Tongtong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B: INCYTE PHARMACEUTICALS,
3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             single
                                                     Chaitanya
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1508
                                                       ß
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PA-0001 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 94.6; DB 4;
Pred. No. 1.7e-20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    79;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1208;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                          859
                                                                                                                                                                                                                                                                                       183
                                                                                                                                                                                                                                                                                                                                                           123
                                                                                                                                                                                                                                                                                                                                                                                                                                63
```

Carter, Darrick Retter, Marc Mannion, Jane

```
; APPLICANT: Fan, Liqun
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
; FILE REFERENCE: 210121.478C14
; CURRENT APPLICATION NUMBER: US/09/702,705
; CURRENT FILING DATE: 2000-10-30
; NUMBER OF SEQ ID NOS: 183
; SOPTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 801
; LENGTH: 1619
; TYDE: DNA
; ORGANISM: Homo sapien
US-09-702-705-801
Search completed: February 15, Job time: 363.039 secs
                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                              뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    경 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 232; Conserv
                                                                                                                                                                                                                                                                                                        677
                                                                                                                                                      737
                                                                                                                                                                                                                                                                                                                                                                               844
                                                                                                                                                                                                                                                                                                                                                                                                                                                          617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           380 GCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAACC---ACTTTGAA 436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          544 CAGAATGGGATTGGTTAATGTGTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATC 603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         320
                                                                                                                                                                                                                         904 ACTGGAGCATCAGGGCCAAAGAGC 927
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        484 ATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG 543
                                                                                                                                                                                                                                                                                                                                                           TCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGATTAAGAACCAG 903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTTCTA 723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCCTTCCCTTCCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATGCTGGAC
                                                                                                                                                      TCCTGTGCTGCGGAGGCTGCTAGC
                                                                                                                                                                                                                                                                                                TCGCCCAACTTCAGCCTCATGGGGCAGCTGCTGCAGTTCGAGTCCCAGGTGCTGGCCACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGAAACGGGTGAGGCTGGAGGAGGCCTTCGAGTTCGTTAAGCAGCGCCCGCAGCATTATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    enecacneceses de la reconstruction de la reconstruc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   redritcategaagecaragagracarecategaageacreceregecerecre
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATCAGCTCC 496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.7%; Score 93.6; DB 4; Length 1619; 52.3%; Pred. No. 4.6e-20; ative 0; Mismatches 209; Indels 3
                                   2005, 11:51:06
                                                                                                                                                      760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             379
                                                                                                                                                                                                                                                                                                                                                                                                                                                  676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           783
```

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Minimum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB seq length: 0
DB seq length: 2000000000
       Published Applications NA:*

1: /cgn2 6/ptodata/1/pubpna/PU
2: /cgn2 6/ptodata/1/pubpna/PU
3: /cgn2 6/ptodata/1/pubpna/PU
4: /cgn2 6/ptodata/1/pubpna/PU
5: /cgn2 6/ptodata/1/pubpna/PU
6: /cgn2 6/ptodata/1/pubpna/PU
6: /cgn2 6/ptodata/1/pubpna/PU
6: /cgn2 6/ptodata/1/pubpna/PU
9: /cgn2 6/ptodata/1/pubpna/PU
9: /cgn2 6/ptodata/1/pubpna/PU
11: /cgn2 6/ptodata/1/pubpna/PU
12: /cgn2 6/ptodata/1/pubpna/PU
13: /cgn2 6/ptodata/1/pubpna/PU
14: /cgn2 6/ptodata/1/pubpna/PU
15: /cgn2 6/ptodata/1/pubpna/PU
16: /cgn2 6/ptodata/1/pubpna/PU
17: /cgn2 6/ptodata/1/pubpna/PU
18: /cgn2 6/ptodata/1/pubpna/PU
19: /cgn2 6/ptodata/1/pubpna/PU
20: /cgn2 6/ptodata/1/pubpna/PU
21: /cgn2 6/ptodata/1/pubpna/PU
22: /cgn2 6/ptodata/1/pubpna/PU
22: /cgn2 6/ptodata/1/pubpna/PU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5378673 seqs, 2950229984 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IDENTITY_NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-029-345A-108_COPY_538_2532
1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              February 15, 2005, 10:38:29; Search time 1217.22 Seconds (without alignments)
/cgn2_6/ptodata/1/pubpna/USO7_PUBCOMB.Beq:*
/cgn2_6/ptodata/1/pubpna/USO6_NEW_PUB.Beq:*
/cgn2_6/ptodata/1/pubpna/USO6_PUBCOMB.Beq:*
/cgn2_6/ptodata/1/pubpna/USO6_PUBCOMB.Beq:*
/cgn2_6/ptodata/1/pubpna/USO7_NEW_PUB.Beq:*
/cgn2_6/ptodata/1/pubpna/USO8_PUBCOMB.Beq:*
/cgn2_6/ptodata/1/pubpna/USO8_NEW_PUB.Beq:*
/cgn2_6/ptodata/1/pubpna/USO8_PUBCOMB.Beq:*
/cgn2_6/ptodata/1/pubpna/USO8_PUBCOMB.Beq:*
/cgn2_6/ptodata/1/pubpna/USO9_PUBCOMB.Beq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              atggcccatgagatgattgg.....tggaaatcattgaggtctcc 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9670.754 Million cell updates/sec
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

g
Ź
RI
H
່ ເວັ

										. 20
10	9	8	7	6	5	4	w	N	_	Result
1991.8	1991.8	1991.8	1991.8	1991.8	1991.8	1991.8	1991.8	1991.8	1991.8	Score
99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	99.8	Query Match
3625	3544	3544	3544	3521	3496	3059	1998	1998	1998	Query Match Length DB ID
17	18	17	9	18	ø	17	18	17	9	8
US-10-425-114-26234	US-10-377-072-25	US-10-377-072-25	US-09-816-494-1	US-10-370-715B-261	US-09-964-277-1	US-10-257-026-1	US-10-377-072-27	US-10-377-072-27	US-09-816-494-3	ID
Sequence 26234, A	Sequence 25, Appl	Sequence 25, Appl	Sequence 1, Appli	Sequence 261, App	Sequence 1, Appli	Sequence 1, Appli	Sequence 27, Appl	Sequence 27, Appl	Sequence 3, Appli	Description
	.8 99.8 3625 17 US-10-425-114-26234	.8 99.8 3544 18 US-10-377-072-25 .8 99.8 3625 17 US-10-425-114-26234	.8 99.8 3544 17 US-10-377-072-25 .8 99.8 3544 18 US-10-377-072-25 .8 99.8 3625 17 US-10-425-114-26234	.8 99.8 3544 9 US-09-816-494-1 99.8 3544 17 US-10-377-072-25 8 99.8 3544 18 US-10-377-072-25 .8 99.8 3625 17 US-10-425-114-26234	.8 99.8 3521 18 US-10-370-715B-261 .8 99.8 3544 9 US-09-816-494-1 .8 99.8 3544 17 US-10-377-072-25 .8 99.8 3544 18 US-10-377-072-25 .8 99.8 3625 17 US-10-425-114-26234	.8 99.8 3496 9 US-09-964-277-1 8 8 99.8 3521 18 US-10-370-715B-261 8 99.8 3544 9 US-09-816-494-1 8 1.8 99.8 3544 17 US-10-377-072-25 1.8 99.8 3544 18 US-10-377-072-25 1.8 99.8 3625 17 US-10-425-114-26234	8 99.8 3059 17 US-10-257-026-1 8 99.8 3496 9 US-09-964-277-1 1.8 99.8 3521 18 US-10-370-715B-261 1.8 99.8 3544 9 US-09-816-494-1 1.8 99.8 3544 17 US-10-377-072-25 1.8 99.8 3544 18 US-10-377-072-25 1.8 99.8 3544 17 US-10-377-072-25 1.8 99.8 3544 17 US-10-377-072-25	8 99.8 1998 18 US-10-377-072-27 8 99.8 3059 17 US-10-257-056-1 1.8 99.8 3496 9 US-09-964-277-1 1.8 99.8 3521 18 US-10-370-715B-261 1.8 99.8 3524 9 US-09-816-494-1 1.8 99.8 3544 9 US-10-377-072-25 1.8 99.8 3544 18 US-10-377-072-25 1.9 99.8 3625 17 US-10-425-114-26234	99.8 1998 17 US-10-377-072-27 8 99.8 1998 18 US-10-377-072-27 8 99.8 3059 17 US-10-257-026-1 99.8 3059 17 US-10-257-026-1 18 99.8 3496 9 US-09-964-277-1 18 99.8 3521 18 US-10-370-7158-261 18 99.8 3544 9 US-09-816-494-1 19 99.8 3544 17 US-10-377-072-25 19 99.8 3544 17 US-10-377-072-25 19 99.8 3544 17 US-10-377-072-25 19 99.8 3544 17 US-10-377-072-25	.8 99.8 1998 9 US-09-816-494-3 .8 99.8 1998 17 US-10-377-072-27 .8 99.8 1998 18 US-10-377-072-27 .8 99.8 3059 17 US-10-257-026-1 .8 99.8 3059 17 US-10-257-026-1 .8 99.8 3541 18 US-10-370-715B-261 .8 99.8 3544 19 US-10-370-772-25 .8 99.8 3544 17 US-10-377-072-25 .8 99.8 3544 17 US-10-377-072-25 .8 99.8 3544 17 US-10-377-072-25 .8 99.8 3545 17 US-10-425-114-26234

12 1991.8 99.8 4790 18 US-10-648-593-115 Sequence 115, App 14 1991.8 99.8 5145 18 US-10-357-390-20824 Sequence 20894, A 1991.8 1991.8 99.8 5145 18 US-10-357-390-21071 Sequence 20171, A 1991.8 99.8 5145 18 US-10-357-390-21071 Sequence 21083, A 1991.8 99.8 5145 18 US-10-357-390-21307 Sequence 21083, A 1991.8 99.8 5145 18 US-10-357-390-21307 Sequence 21087, A 1991.8 99.8 5145 18 US-10-357-390-21307 Sequence 21083, A 1991.8 99.8 5145 18 US-10-357-390-21307 Sequence 26665, A 1991.8 99.8 5145 18 US-10-357-390-26615 Sequence 2685, A 1991.8 99.8 5145 18 US-10-357-390-26615 Sequence 26912, A 1991.8 99.8 5145 18 US-10-357-390-27145 Sequence 27149, A 1991.8 99.8 5145 18 US-10-357-390-101717 Sequence 27149, A 1991.8 99.8 5145 18 US-10-357-390-101717 Sequence 27149, A 1991.8 99.8 5145 18 US-10-357-390-101143 Sequence 27149, A 1991.8 99.8 5145 18 US-10-357-390-40868 Sequence 27149, A 1991.8 99.8 5145 18 US-10-357-390-10878 Sequence 27249, A 1991.8 99.8 5145 18 US-10-357-390-10878 Sequence 27249, A 199																																		
1991.8 99.8 4790 18 US-10-648-593-115 Sequence 20 1991.8 99.8 5145 18 US-10-357-930-20969 Sequence 20 1991.8 99.8 5145 18 US-10-357-930-20969 Sequence 21 1991.8 99.8 5145 18 US-10-357-930-21071 Sequence 21 1991.8 99.8 5145 18 US-10-357-930-21303 Sequence 21 1991.8 99.8 5145 18 US-10-357-930-21303 Sequence 21 1991.8 99.8 5145 18 US-10-357-930-22820 Sequence 22 1991.8 99.8 5145 18 US-10-357-930-26815 Sequence 26 1991.8 99.8 5145 18 US-10-357-930-26815 Sequence 26 1991.8 99.8 5145 18 US-10-357-930-26815 Sequence 26 1991.8 99.8 5145 18 US-10-357-930-26912 Sequence 27 1991.8 99.8 5145 18 US-10-357-930-27145 Sequence 27 1991.8 99.8 5145 18 US-10-357-930-10717 Sequence 27 1991.8 99.8 5145 18 US-10-357-930-10717 Sequence 28 1991.8 99.8 99.8 99.8 99.8 99.8 99.8 9			ი	ი					ი	ი	a	ი																						
8 99.8 4790 18 US-10-648-593-115 Sequence 20 99.8 5145 18 US-10-357-930-20824 Sequence 20 99.8 5145 18 US-10-357-930-20869 Sequence 21 99.8 5145 18 US-10-357-930-21071 Sequence 21 99.8 5145 18 US-10-357-930-21083 Sequence 21 99.8 5145 18 US-10-357-930-21300 Sequence 21 99.8 5145 18 US-10-357-930-22820 Sequence 22 99.8 5145 18 US-10-357-930-26669 Sequence 22 99.8 5145 18 US-10-357-930-26815 Sequence 26 99.8 5145 18 US-10-357-930-26912 Sequence 26 99.8 5145 18 US-10-357-930-27145 Sequence 27 99.8 5145 18 US-10-072-012-257 Sequence 27 99.8 2732 17 US-10-072-012-257 Sequence 27 99.7 2102 17 US-10-072-012-257 Sequence 27 99.7 200 17 US-10-072-012-257 Sequence 29 99.8 2732 18 US-10-357-930-41071 Sequence 20 99.8 2732 18 US-10-357-930-41068 Sequence 20 99.8 2732 18 US-10-357-930-41068 Sequence 21 20.8 467 18 US-10-357-930-4106 Sequence 21 20.6 461 18 US-10-357-930-4106 Sequence 31 20.6 461 18 US-10-357-930-4086 Sequence 31 20.6 461 18 US-10-357	45	44	43	42	41	6	39	38	37	36																					15	14	13	12
.8 4790 18 US-10-648-593-115 Sequence 21 .8 5145 18 US-10-357-930-20824 Sequence 22 .8 5145 18 US-10-357-930-20824 Sequence 22 .8 5145 18 US-10-357-930-21083 Sequence 23 .8 5145 18 US-10-357-930-21083 Sequence 21 .8 5145 18 US-10-357-930-21307 Sequence 21 .8 5145 18 US-10-357-930-22820 Sequence 22 .8 5145 18 US-10-357-930-26815 Sequence 26 .8 5145 18 US-10-357-930-26912 Sequence 27 .8 5145 18 US-10-357-930-28675 Sequence 27 .8 6461 18 US-10-357-930-11243 Sequence 27 .8 6461 18 US-10-357-930-3416 Sequence 41 .8 6461 18 US-10-357-930-11243 Sequence 41 .8 6461 18 US-10-357-930-11243 Sequence 31 .8 6461 18 US-10-357-930	œ	•	•	•	•	•	10.	•	•	15.	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	91.	91.	91.	91.
18 US-10-648-593-115 18 US-10-357-930-20824 18 US-10-357-930-20824 18 US-10-357-930-20829 18 US-10-357-930-21071 18 US-10-357-930-21083 18 US-10-357-930-21303 18 US-10-357-930-21303 18 US-10-357-930-22820 18 US-10-357-930-22820 18 US-10-357-930-26619 18 US-10-357-930-26912 18 US-10-357-930-26912 18 US-10-357-930-26912 18 US-10-357-930-26923 18 US-10-357-930-27149 18 US-10-357-930-27149 18 US-10-357-930-27149 18 US-10-357-930-28675 19 US-10-357-930-28675 2 Sequence 27 2 US-10-168-506-2 2 Sequence 27 2 US-10-094-749-673 2 US-10-072-012-255 2 US-10-072-012-255 2 US-10-072-012-257 2 US-10-357-930-1017 2 US-10-357-930-11243 2 US-10-357-930-10898 2 US-10-357-930-10898 2 US-10-357-930-10898 2 US-10-357-930-10878 3 US-10-357-930-10878	19.1	•	•	•	•	•	•	•	•	•	•	٠	•	•	٠	•	•	•	٠	٠	•	•	•	•	•	•	٠	•	•	•		•	•	•
US-10-648-593-115 US-10-357-930-20824 US-10-357-930-20869 US-10-357-930-21071 US-10-357-930-21083 US-10-357-930-21303 US-10-357-930-21303 US-10-357-930-2820 US-10-357-930-28815 US-10-357-930-26815 US-10-357-930-26815 US-10-357-930-26815 US-10-357-930-27145 US-10-357-930-27145 US-10-357-930-27145 US-10-357-930-27145 US-10-357-930-27145 US-10-357-930-27145 US-10-357-930-27145 US-10-357-930-28675 US-10-10-257-930-28675 US-10-10-255-930-28675 US-10-10-2012-255 US-10-357-930-31090 US-10-357-930-31090 US-10-357-930-31090 US-10-357-930-311040 US-10-357-930-31243 US-10-357-930-31243 US-10-357-930-31243 US-10-357-930-31346 US-10-357-930-31099 US-10-357-930-31099 US-10-357-930-31099 US-10-357-930-31099 US-10-357-930-31099 US-10-357-930-31099 US-10-357-930-31099 US-10-357-930-31099 US-10-357-930-310878 US-10-357-930-310878 US-10-357-930-310878 US-10-357-930-30898 US-10-358-31	2453	427	438	408	461	461	461	418	467	467	467	425	1916	3332	2200	2071	2966	2102	2732	5145	5145	5145	5145	5145	5145	5145	5145	5145	5145	5145	5145	5145	5145	4790
-593-115 -593-115 -593-20824 -590-20824 -590-20824 -590-21071 -590-21083 -590-21083 -590-21083 -590-22820 -590-26815 -590-26815 -590-26815 -590-26912 -590-27145 -590-27146 -590-27146 -590-27147 -590-27147 -590-27147 -590-27148 -590-27148 -590-27148 -590-27148 -590-27149 -590	13	18	18	18	18	18	18	18	18	18	18	18	17		17	17	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
00001120110010000000000000000000000000	-10-005-	-10-357-	-10-357-930-3	-10-357-930-1	-10-357-930-4	-10-357-930-	-10-357-930-	-10-357-930-	-10-357-930-	-10-357-930-4086	-10-357-930-3190	-10-357-930-1071	108-260A-24	277-2	-10-072-01	-10-072-01	-10-296,-11	-10-094-74	-10-168-50	-10-357-930-28	-10-357-930-27	-10-357-930-27	-10-357-930-26	-10-357-930-26	-10-357-930-2681	-10-357-930-2666	-10-357-930-2282	-10-357-930-2130	-10-357-930-2130	-10-357-930-2108	-10-357-930-2107	-10-357-930-2096	-10-357-930-2082	-10-648-593-11
	e 1,	e 108	e 32(e 10898,	e 41346,	41000,	32416,	11243,	41017,	40868,	31909,	10717,	e 24	20,	25	25	52	67	ຸນ	28	27	27	26	e 26	e 26	e 26	221	21:	21	210	equence 21	equence 20:	equence 20	equence 11:

ALIGNMENTS

```
Sequence 3, Application US/09816494
Patent No. US20020034807A1
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUJ.
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND
TITLE REFERENCE: 10448-030002
CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT APPLICATION NUMBER: US 60/191,858
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2001-03-24
NUMBER OF SEQ ID NOS: 10
                                                                      Ś
S
                                     밁
                                                                                                                   밁
                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                          ; LENGTH: 1998
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: 1
                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                    1993;
121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 180
                                                              61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACAATCC 120
                                     61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                          1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                     1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA 60
                                                                                                                                                                                                                                                                                                                                                                              FastSEQ for Windows Version 4.0
                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                99.8%;
                                                                                                                                                                                                Score 1991.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DUAL SPECIFICITY AND USES THEREFOR
                                                                                                                                                                                                                                       멂
                                                                                                                                                                                                2
                                                                                                                                                                                                                                       9
                                                                                                                                                                                              Indels 0;
                                                                                                                                                                                                                                       Length 1998;
                                                                                                                                                                                              Gaps
                                       120
```

961 GAACCTGTCCCTGCTGCTCAGAGGGTGGACAGAAAAGCGAGACGCCCTCAGTCCACCC 1020		721 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCCATCGCTATCGCCTACATCATG 780	601 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 660	481 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540	361 CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGAAAATCC 420	241 TGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	
RESULT 2 US-10-377-072-27 I US-10-377-072-27 Sequence 27, Application US/10377072 Publication No. US20040009501A1 GENERAL INFORMATION: APPLICANT: Milennium Pharmaceuticals Inc. APPLICANT: Curtis, Rory A.J. APPLICANT: Logan, Thomas Joseph APPLICANT: Glucksmann, Maria A. APPLICANT: Milliamson, Mark J. APPLICANT: Milliamson, Mark J. APPLICANT: Rudolph-Owen, Laura A. APPLICANT: Chun, Miyoung APPLICANT: Tohin, Miyoung APPLICANT: Tohin, Miyoung TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117, TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES TITLE OF INVENTION: MOLUSES THEREFOR FILE REFERENCE: MPI03-0180MNIM	Oy 1921 AGGTCACGGGAGGGCTGGGAAAGTTGGGCAGTCAGCTTTTCGGGCAGCATGGAA 1980	Qy 1801 CAGAAGCCAAGTGACAAGCTGACTCGCGGCGAGCTGGCATGAAGAGAGCCCCTTTGAA 1860	Qy 1681 ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTTACTCTT 1740	Qy 1561 CTTTCCACCAGCAGCAGCACTCACGAAGTCTGCTGGCCTGAGGCTTAAGGGCTGGCAC 1620	Qy 1441 AGCAAGCAATTGCATTCGGTCAGAACCAGCAGCAGCTGGCACCGCCCAGAGGTCCCTTTTA 1500	Oy 1321 AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT 1380	1201 TCT 1261 TCC 1261 TCC

중 음 중

유왕

8 8 8 8 8

음 성

B 5

8 8 8 8 8 8 8

음 성

당 상 당

Ś

음 성 음 성

8 8

뭐

```
CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR PILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR FILING DATE: 2000-06-29
PRIOR PILING DATE: 2000-011-28
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR PILING DATE: 2000-03-07
PRIOR PILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: US 60/189,801
PRIOR PILING DATE: 2000-04-26
PRIOR PILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR PILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR APPLICATION NUMBER: US 99/816,494
PRIOR PILING DATE: 2001-05-19
PRIOR PILING DATE: 2001-03-22
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-22
Remmaining Prior Application data removed - See
NUMBER: OF SEQ ID NOS: 114
SOPTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 27
LENGTH: 1998
TYPE: DNA
ORGANISM: Homo Sapiens
  음 성
                                 8 8 8 8
                                                                                                                          밁
                                                                                                                                              ঠ
                                                                                                                                                            문
                                                                                                                                                                                   ર્ક
                                                                                                                                                                                                          밁
                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                      ક
                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                              ર્શ
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                          ; NAME/KEY: CDS
; LOCATION: (1)...(1998)
US-10-377-072-27
                                                                                                                                                                                                                                                                                                                                                                                 Query Match 99.8%;
Best Local Similarity 99.9%;
Matches 1993; Conservative
                                                                                                                           301
                                                                                                                                               301
                                                                                                                                                                    241
                                                                                                                                                                                        241
                                                                                                                                                                                                              181
 481
                                         421
                                                                                  361
                                                                                                       361
                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                            121
               481
                                                             421
                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                             μ
                                                                                                                          GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                   GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                  CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                        ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA
                                                                                                                                                                                                              GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                      CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                            AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                   ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                             CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                  ..
                                                                                                                                                                                                                                                                                                                                                                                 Score 1991.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   See
                                                                                                                                                                                                                                                                                                                                                                                                       DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                File Wrapper
                                                                                                                                                                                                                                                                                                                                                                                  2;
                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   õ
                                                                                                                                                                                                                                                                                                                                                                                                       1998;
                                                                                                                                                                                                                                                                                                                                                                                  <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PALM.
                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                  540
                                         480
                                                              480
                                                                                   420
                                                                                                       420
                                                                                                                           360
                                                                                                                                                360
                                                                                                                                                                    300
                                                                                                                                                                                         300
                                                                                                                                                                                                              240
                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                             6
                                                                                                                                                                                                                                                                                                                                                                                  0
                         S
                                                               S
                                                                                                          Ś
                                                                                                                                    밁
                                                                                                                                                  Ś
                                                                                                                                                                             밁
                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                 Ś
                                               밁
                                                                                      밁
                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        덩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                   1501
                                                                                            1441
                                                                                                                1441
                                                                                                                                    1381
                                                                                                                                                         1381
                                                                                                                                                                              1321
                                                                                                                                                                                                   1321
                                                                                                                                                                                                                       1261
                                                                                                                                                                                                                                           1261
                                                                                                                                                                                                                                                                1201
                                                                                                                                                                                                                                                                                                          1141
                                                                                                                                                                                                                                                                                                                              1141
                                                                                                                                                                                                                                                                                                                                                   1081
                                                                                                                                                                                                                                                                                                                                                                      1081
                                                                                                                                                                                                                                                                                                                                                                                             1021
            1561
                                                                        1501
                                                                                                                                                                                                                                                                                     1201
                                                                                                                                                                                                                                                                                                                                                                                                                 1021
                                                                                                                                                                                                                                                                                                                                                                                                                                     961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                          961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                  AAGCTATGCCAGTTCTCCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                    CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTTCCACCAGCCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                       AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                      GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                 GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                      TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                  TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTAGTGCACTGTTTAGCTGGGATCTCCCGCCCCCCCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGAGGA TGGACATGT CTTTTAGATGAAGCTTACAGATTTGTGAAAGAAAAAAAAGACCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                             AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                              1620
                                                                                                                 1500
                                                                        1560
                                                                                             1500
                                                                                                                                      1440
                                                                                                                                                                                                 1380
                                                                                                                                                                                                                                                                                                                                                                       1140
            1620
                                                   1560
                                                                                                                                                          1440
                                                                                                                                                                              1380
                                                                                                                                                                                                                       1320
                                                                                                                                                                                                                                           1320
                                                                                                                                                                                                                                                                 1260
                                                                                                                                                                                                                                                                                     1260
                                                                                                                                                                                                                                                                                                           1200
                                                                                                                                                                                                                                                                                                                              1200
                                                                                                                                                                                                                                                                                                                                                   1140
                                                                                                                                                                                                                                                                                                                                                                                                                 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1020
                                                                                                                                                                                                                                                                                                                                                                                             1080
                                                                                                                                                                                                                                                                                                                                                                                                                                     1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
```

```
CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR PELICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR FILING DATE: 2000-11-28
PRIOR PELLING DATE: 2000-01-28
PRIOR PELLING DATE: 2000-01-28
PRIOR PELLING DATE: 2000-03-07
PRIOR PELLING DATE: 2000-03-07
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR PELLING DATE: 2001-04-25
PRIOR PELLING DATE: 2001-04-26
PRIOR PELLING DATE: 2001-04-26
PRIOR PELLING DATE: 2001-03-21
PRIOR PELLING DATE: 2001-05-11
PRIOR PELLING DATE: 2001-05-12
PRIOR PELLING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR PILLING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 3
US-10-377-072-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        日
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
              Remaining Prior Application data
NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Ver
SEQ ID NO 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 27, Application US/10377072
Publication No. US20040157221A9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Rudolph-Owen, Laura A.
APPLICANT: Chun, Miyoung
APPLICANT: Tsai, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPIO3-0180MNIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Millennium Pharmaceuticals Inc.
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCATIGAGGTCTCC 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAQAGAGAGCATCATGTCAQAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Meyers, Rachel E. Williamson, Mark J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Curtis, Rory A.J.
Logan, Thomas Joseph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCATTGAGGTCTCC 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGGCAGCATGGAA 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAA 1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ĠĊĊŦĀĊĀĠĊŦĠĊĀĠĊĊĀĠĊŦĠĊĊĊĀĊŦŦĠĊĠĠĀĠĀĊĊĀĀĠŦĊŦĀŦŦĊŦĠŦĠĊĠĠĠĠĠĠĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCTACAGCTGCAGCCGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Glucksmann, Maria A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          reddararerredeceeccadaeereraeeeerreeerdaeeaeeagerderarriteee
                           Windows Version 4.0
                                                          removed -
                                                         See
                                                      File Wrapper or
                                                                                                                                                                                                                                                                                                                                                                                                                                       AND 49933 MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; LENGTH: 1998
; TYPE: DNA
; ORGANISM: Homo Sapiens
; EEATURE:
; NAME/KEY: CDS
; LOCATION: (1)...(1998)
US-10-377-072-27
                                    밁
                                                              Ş
                                                                                             문
                                                                                                                          Ş
                                                                                                                                                          문
                                                                                                                                                                                  Ś
                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 99.8%;
Best Local Similarity 99.9%;
Matches 1993; Conservative
       901
                                      841
                                                                 841
                                                                                               781
                                                                                                                            781
                                                                                                                                                          721
                                                                                                                                                                                                                     661
                                                                                                                                                                                       721
                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 GACAAAGTGTTAATTACAGAGCTCATCCAGCGATTCAGCGAAACATAAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        \vdash
CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                         CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                    ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGAATTAAGAAC
                                                                                                                                                  CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                CCGTGGTTGGACAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                    CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                              ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                         CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAGAGGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                           ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTTGTGAGAAATTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACTGTTTTCTCACTGTACTTCTCGCGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACAAAGTGTTAATTIACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTOTAGTOCOTACOTGCATTTCTCAGCOTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         rgcagreagaaggrigragritacgareaaagereecaagargrigeerererererea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTGGAAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTGGAACGGAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCCCATGAGATGGTTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                              TTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 1991.8;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ν
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
   960
                                                          900
                                                                                          840
                                                                                                                                                                                  780
                                                                                                                     840
                                                                                                                                                    780
                                                                                                                                                                                                              720
                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
```

```
1321
                    1981
                                                                                                                                                                                                                                                       1741
                                                                                                                                                                                                                                                                                                                       1681
                                                                                                                                                                                                                                                                                                                                                        1681
                                                                                                                                                                                                                                                                                                                                                                                         1621
                                                                                                                                                                                                                                                                                                                                                                                                                          1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        901
                                                                                                                                                                                                                                                                             GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCCAAGTCTATTCTGTGCGCAGGCGG 1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATAAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC 1020
ATCATTGAGGTCTCC
                                                                                                                                                                                                      ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT 1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGCTATGCCAGTTCTCCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGGAAACCAGTCCT 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG 1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 1980
                                                                                                                                         AAGCAGTTTAAACGCAGAAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                         TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC 1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ANGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC 1140
                                                                                                                    AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                       TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                   1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1500
                                                    1980
                                                                                                                                                   1920
                                                                                                                                                                                     1860
                                                                                                                                                                                                                                                                                                                       1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1320
                                                                                                                                                                                                                                                     1800
                                                                                                                                                                                                                                                                                                                                                                                       1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 4

US-10-257-026-1

; Sequence 1, Application US/10257026

; Publication No. US20040086859A1

; GENERAL INFORMATION:

; APPLICANT: Merck Patent GmbH

; TITLE OF INVENTION: New dual specificity phosphatase

; FILE REFERENCE: DUSP10KDWS

; CURRENT APPLICATION NUMBER: US/10/257,026

; CURRENT PILING DATE: 2003-11-07

; NUMBER OF SEQ ID NOS: 3

; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 1
 Ś
                           밁
                                                           S
                                                                                                   밁
                                                                                                                         ঠ
                                                                                                                                                                문
                                                                                                                                                                                               á
                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                      뭐
                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; NAME/KEY: CDS
; LOCATION: (127)..(2121)
US-10-257-026-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 3059
TYPE: DNA
ORGANISM: Homo :
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1981 ATCATTGAGGTCTCC 1995
                                                                                                                                                                                                                                     547
                                                                  109
                                                                                                    667
                                                                                                                                  541
                                                                                                                                                                   607
                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                      487
                                                                                                                                                                                                                                                                                                                                                                        427
                                                                                                                                                                                                                                                                                                                                                                                                                                        367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             187
   199
                                  727
                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                     ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTTGTGAGAAAATTTTTG 660
                                                                                                                      CAGCAGAATGGGATTGGTTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGCCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                   CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT 726
                                                                                                                                                                     CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG 666
                                                                                                                                                                                        CGAATTTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                        ACTCTAGTCCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                      CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                     CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                      GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                       GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                     ACTOTAGTOCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 1991.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                     909
                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                       546
                                                                                                                                                                                                                                                                                                                                                                          486
                                                                                                                                                                                                                                                                                                                                                                                                                                          426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               246
```

음 중

음 성 음 성

8 8 8 8 8

১ ৪ ১

음 중

8 8 8 8

8 8 8 8 8

ঠ ৪

음 성 음 성 음

Ş	B &	Db Qy	용 성	B 8	d d	B 5	? B &	}	8 8	8 8	9 dd (4	g 40°	, B &	B	β	B 8	₽ \$	€ B :	\$ B
1741 GCCTACAGCTGCAGCTAGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG 1800	1681 ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT 1740	1621 TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCTGGTATTTTGCC 1680	1561 CTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC 1620 												Η .	841 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGATTAAGAAC 900 	907 AAGACGATGGACATAGATCTAGATGAAGATTTGTGAAAGAAA		
Qy 421 ACTCTAC	Qy 361 CTTGCA Db 922 CTTGCA	2y 301 GACTGT		742	682	622	562	Best Local Similar Matches 1993; Con	; ORGANISM: Homo US-09-964-277-1	SOFTWARE: FABLESE ID NO 1 LENGTH: 3496	FILE REFERENCE: CURRENT APPLICAT: CURRENT FILING DI	GENERAL INFORMATICAL APPLICANT: Luche APPLICANT: Mei, APPLICANT: Wei,	RESULT 5 US-09-964-277-1 Sequence 1, Applia	Db 2107	Qy 1981	Db 2047			Qy 1801

```
IC. Ralf M.

1, Bo

YION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE

1, 200125,434

17ION NUMBER: US/09/964,277

DATE: 2001-09-25
                                                                                                                                                                                                                                                                                                                            | CCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAA 1860
AGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                            AGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAAATCC
                                                                                                                                       AGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                 TTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                             AACGGAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                          99.8%; Score 1991.8; srity 99.9%; Pred. No. 0; mservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGAGGTCTCC 1995
                                                                                                                                                                                                                                                                               AACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3Q for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ication US/09964277
20137170A1
ION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGCTGCAGCCAGCTGCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                           TTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                       TTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                                                                                                   DB 9;
                                                                                                                                                                                                                                                                                                                                                                             2;
                                                                                                                                                                                                                                                                                                                                                                                                  Length 3496;
                                                                                                                                                                                                                                                                                                                                                                            <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                              300
                                                                                                                                                                                                           240
1041
                      480
                                             981
                                                                                          921
                                                                                                                 360
                                                                                                                                      861
                                                                   420
                                                                                                                                                                                     801
                                                                                                                                                                                                                                   741
                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                               681
                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                              621
                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1926
```

02 AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA 20
41 AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGCAGCACGCCCCAGAGGTCCCTTTTA 150
1381 GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG 1440
1321 AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT 1380
1261 TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC 1320
1201 TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC 1260
141 AGTGGGCTGCACCTGT
081 CCCAGCGTGCCCAGCGTGCAGCC
1021 TGTGCCGACTCTGCTACCTCAGAGGCAGGAGGACAAAGGCCCGTGCATCCCGCCAGCGTG 1080
961 GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC 1020
841 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 900
81 AAGAGGATGGACATGT
721 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCCTATCGCCTACATCATG 780
61 CCGTGGTTGGACAAAI
601 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 660
541 CAGCAGAATGGGATTGGTTAATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT 600
B1 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATC

ક

맑

음 성 음

ક 문 ક 밁 ঠ 밁 ঠ 유 5 뭐 ક 문 ঠ 문 S 밁 ঠ 문 ঠ 밁 ঠ 밁 ક 문 ঠ 문 S 밁 5 밁

```
Patin Docket Preview
APPLICANT: BODARY, SARAH C.
APPLICANT: CLARK, HILLARY
APPLICANT: BRISDELL, HUNTE
APPLICANT: BRISDELL, HUNTE
APPLICANT: JACKMAN, JANET
APPLICANT: WILLIAMS, P. MICKEY
APPLICANT: WILLIAMS, P. MICKEY
APPLICANT: WOOD, WILLIAM I.
APPLICANT: WOOD, WILLIAM I.
APPLICANT: WIJTHOWAS D.
TITLE OF INVENTION: Compositions and Methods for the Treatment of Immune
TITLE OF INVENTION: Related Diseases
FILE REFERENCE: P1948R1-US
CURRENT APPLICATION NUMBER: US/10/370,715B
CURRENT PILLING DATE: 2003-02-21
NUMBER OF SEQ ID NOS: 742
SEQ ID NO 261
LENGTH: 3521
              S
                                    문
                                                               5
                                                                                                밁
                                                                                                                   8
                                                                                                                                                                                                            ; TYPE: DNA; Homo sapien US-10-370-715B-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 6
US-10-370-715B-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 261, Application US/10370715B Publication No. US20040258678A1 GENERAL INFORMATION:
                                                                                                                                                     Query Match
Best Local Similarity
Matches 1993; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1561
                 121
                                                                                                  564
                                                                      61
                                                                                                                            \vdash
CACATTITGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                            AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                  CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGACCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGGAATACAATACATCC
                                                                                                  ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCATTGAGGTCTCC 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCTACAGCTGCAGCCAGCTGCCCACTTGCCGGAGACCAAGTCTATTCTGTGCGCAGGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                     99.8%;
nilarity 99.9%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2556
                                                                                                                                                     Score 1991.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                      0;
                                                                                                                                                                                   DB 10;
                                                                                                                                                      <u>ب</u>
                                                                                                                                                                                 Length
                                                                                                                                                                                   3521;
                                                                                                                                                       0
                                                                                                                                                       Gaps
                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1620
                                            683
                                                                                                  623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2241
                 180
```

청 유

961 GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGACGCCCCAGTCCACCC 1020	BOA TECAGTECANAGETTETAGETTAACTTCGAGAAAAAGCTCCAAAAAAAAAA	684 CACATTITGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 743 181 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT 240
RESULT 7 US-09-816-494-1 Sequence 1, Application US/09816494 Patent No. US20020034807A1 GENERAL INFORMATION: APPLICANT: Meyers, Rachel A. FITTLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY ITTLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR FILL REFERENCE: 10448-03002 CURRENT APPLICATION NUMBER: US/09/816,494 CURRENT FILING DATE: 2001-03-23 PRIOR APPLICATION NUMBER: US 60/191,858 PRIOR PRILING DATE: 2000-03-24 NUMBER OF SEQ ID NOS: 10 SOFTMARE: FASTSEQ for Windows Version 4.0 SEQ ID NO 1 LENGTH: 3544 TYPE: DNA ORGANISM: Homo sapiens	Db 1884 AMCTATGCCATTCTCCCCTAGGAACTATCGAACACTCCAGGACCAGGCCTTCAGACAGCCAGGCAGG	OY 1261 TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC 1320

음 성 음

성 음 성

8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

	OY 181 GACAAAGTGTTAATTACAGAGCTCATCCAGCGTATCAGCGAAACATAAGGTTGACATTGAT 240	QY 121 CACATTTIGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 180	Qy 61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 120	P 60	Query Match 99.8%; Score 1991.8; DB 17; Length 3544; Best Local Similarity 99.9%; Pred. No. 0; Matches 1993; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	; NAME/KEY: CDS ; LOCATION: (589)(2586) US-10-377-072-25	5	Remaining NUMBER OF SOFTWARE:		PRIC	PRIOR APPLICATION NUMBER: US 09/843,297 PRIOR FILING DATE: 2001-04-25 PRIOR APPLICATION NUMBER: US 60/199,801 PRIOR PILING DATE: 2000-04-26	PRIOR APPLICATION NUMBER: US 09/723,806 PRIOR FILING DATE: 2000-11-28 PRIOR FILING DATE: 2000-11-28 PRIOR APPLICATION NUMBER: US 60/187,455	FILING DATE: 2003-02-27 PRIOR APPLICATION NUMBER: US 09/895,860 PRIOR FILING DATE: 2001-06-29 PRIOR FILING DATE: 2001-06-29 PRIOR APPLICATION NUMBER: US 60/215,370	** INVENTION: 38692, 46508, 16816, 16839, 49937 ** INVENTION: AND USES THEREFOR **ERENCE: MPIO3-0180MNIM **APPLICATION NUMBER: US/10/377,072	ANT: Chun, Miyoung ANT: Tsai, Fong-Ying OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21	: Logan, Thomas Joseph : Glucksmann, Maria A. : Meyers, Rachel E. : Williamson, Mark J.	3 R Z	RESULT 8 US-10-377-072-25 ; Sequence 25, Application US/10377072
Qy	B 8	pb Q	Db 99	D Q	Ωy Db	ag Vy	B &	Db - Q7	QQ da	ъ <i>Q</i>	D Q	B 89	do Qy	Qy	90 80	Qy	Db Qy	Db
1321 AAGCTATGCCAGTTCTCCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT 1380	1261 TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC 1320	1201 TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC 1260	1141 AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC 1200 	1081 CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC 1140	1021 TGTGCCGACTCTGCTACCTCAGAGGCAGCAGCAGACAAAGGCCCGTGCATCCCGCCAGCGTG 1080	961 GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC 1020 	901 CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT 960 	841 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATAAGAAC 900 	781 AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	721 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTACACCATCATCATG 780	661 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT 720 	601 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 660 	541 CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAAGCCTGACTTT 600 	481 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540 	421 ACTOTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 480	361 CTTGCAGGTGGGTTTGCTGAGTTCTCTGGTTTTTCCCTGGCCTCTGTGAAGGAAAATCC 420 		

```
RESULT 9
US-10-377-072-25

Sequence 25, Application US/10377072

Febblication No. US20040157221A9

GENERAL INFORMATION:

APPLICANT: Millennium Pharmaceuticals Inc.

APPLICANT: Logan, Thomas Joseph
APPLICANT: Logan, Thomas Joseph
APPLICANT: Meyers, Rachel E.

APPLICANT: Meyers, Rachel E.

APPLICANT: Williamson, Mark J.

APPLICANT: Rudolph-Owen, Laura A.

APPLICANT: Rudolph-Owen, Laura A.

APPLICANT: TBai, Fong-Ying

TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,

TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,

TITLE OF INVENTION: AND USES THEREFOR

FILE REFERENCE: MPIO3-0180MNIM

CURRENT FILING DATE: 2003-02-27

PRIOR APPLICATION NUMBER: US 69/895, 860

PRIOR PILING DATE: 2001-06-29

PRIOR APPLICATION NUMBER: US 60/215,370

PRIOR APPLICATION NUMBER: US 60/215,370

PRIOR APPLICATION NUMBER: US 60/215,370

PRIOR APPLICATION NUMBER: US 09/723,806

PRIOR FILING DATE: 2000-11-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGCGAGCTGGCATGAAGAGAGCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCGGATATCTTGGCCCCCAGACCTCTACCCCCTTCCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTTCCACCAGCCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTCCACTGCATCGAAGTGGGAGGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1995
                                                                                                                                                                                                                                                                      MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1968
                                               S
                                                                                                            밁
                                                                                                                                                    S
                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            . В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; FEATURE:
, NAME/KEY: CDS
; LOCATION: (589)...(2586)
US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR FILING DATE: 2000-03-07
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR PILING DATE: 2001-04-25
PRIOR PILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR PILING DATE: 2001-05-21
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR PILING DATE: 2000-05-19
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-27
PRIOR 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFINGER 3544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 99.8%;
Best Local Similarity 99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 3544
TYPE: DNA
ORGANISM: Homo
             1189
                                                                                                               1129
                                                                                                                                                                                                                 1069
                                                                                                                                                                                                                                                                                                                   1009
                                                            601
                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                        949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
             ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                          ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTTGTGAGAAAAATTTTTG 660
                                                                                                            CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAGTACCTGTCCAAAGCCTGACTTT
                                                                                                                                                               CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                         CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                                                                                             ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTGGAACGGAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTGGAAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                     CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGCCCATGAGATGGTTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                   ACTOTAGTOCOTACOTGCATTTOTCAGCOTTGCCTACOTGTTGCCAACATTGGGCCAACO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1991.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      File Wrapper or PALM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 3544;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                            1188
                                                                                                                                                                                                              1128
                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                   1068
                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                     1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       708
```

음 & 밁 5 문 ક 밁 श् 뭐 ঠ 밁 S 밁 S 밁 S 밁 8 밁 S 밁 8 밁

661 CCCTTGTTGGACMATCAGTAGTTTOTTGGAMAGCAMAGCCTTCCAMTGGATGTTT 720 1114 CCCTGGTTGGACMATCAGTTAGTTTAGTTGAMAGCAMAGC

유

문 S 닭 Ś 밁 Ś 뭐 S 밁 S 밁 8 밁 S 밁 S 멍 Ś 밁

8 8 8 8 8

유성

음 상 음 상 음 성

```
GENERAL INFORMATION:

APPLICANT: Liu, Jingdong
APPLICANT: Zhou, Yihua

APPLICANT: Stou, Yihua

APPLICANT: Soreen, Steven E

APPLICANT: Soreen, Steven E

APPLICANT: Tabaska, Jack E

APPLICANT: Cao, Yongwei

TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: 2003-04-28

NUMBER OF SEQ ID NOS: 73128

I ENGRYPH: 3625

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

OTHER INFORMATION: Clone ID: LIB4119-028-H6_FLI

US-10-425-114-26234
           뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SULT 10
-10-425-114-26234
Sequence 26234, Application US/10425114
Publication No. US/20040034888A1
         992
                                           301
                                                                                  932
                                                                                                                 241
                                                                                                                                                         872
                                                                                                                                                                                            181
                                                                                                                                                                                                                                 812
                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                         2569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2449
                                                                                                                                                                                                                                                                                                        752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1741
                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       h 99.8%;
Similarity 99.9%;
GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                        GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                           CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                             CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 180
                                                                                                                                                                                                                                                                                                  AGTGGAACGGAAAAAGTGCTACTAATTGATAGCCCGGCCATTTGTGGAATACAATACATCC 120
                                                                        GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAA 1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Score 1991.8; ; Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 17; Length 3625;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
   1051
                                                                        991
                                                                                                             300
                                                                                                                                                   931
                                                                                                                                                                                      240
                                                                                                                                                                                                                           871
                                                                                                                                                                                                                                                                                                  811
                                                                                                                                                                                                                                                                                                                                                                           751
                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1800
```

961 GAACCTGTCCCTGCTGTCTCAGAGGTGGACAGAAAAGCGAGAGACGCCCTCAGTCCACCC 1020	361 CTTGCAGGTGGGTTTGCTGAAGTTCTCTCGTTGTTTTCCCTGGCCTTCTGTGAAAAAAACC 420
RESULT 11 US-10-343-357-17 Sequence 17, Application US/10343357 Sequence 17, Application US/10343357 Sequence 17, Application US/20040058341A1 GENERAL INFORMATION: APPLICANT: INCYTE GENOMICS, INC.; TANG, Y.Tom APPLICANT: INCYTE GENOMICS, INC.; TANG, Y.Tom APPLICANT: WANG, Yumed E.; STEWART, Elizabeth A. APPLICANT: WANG, Yumed E.; STEWART, Elizabeth A. APPLICANT: WANG, Yumed E.; STEWART, Elizabeth A. APPLICANT: LEE ETRESTINE A.; HAPALIA, April J.A. APPLICANT: LEE, ETRESTINE A.; HAPALIA, April J.A. APPLICANT: WOLL, Dyung Aina M.; TRIBOULEY, Catherine M. APPLICANT: WEARNEY, Liam APPLICANT: WEARNEY, Liam ITLE OF INVENTIONS PROTEIN PHOSPHATASES FILE REFERENCE: PI-0.173 PCT CURRENT APPLICATION NUMBER: US/10/343,357 CURRENT PILING DATE: 2003-01-28 FRIOR APPLICATION NUMBER: US 60/221,679 FRIOR APPLICATION NUMBER: US 60/221,679 FRIOR APPLICATION NUMBER: US 60/223,272 FRIOR FILING DATE: 2000-08-03 PRIOR APPLICATION NUMBER: US 60/223,272 FRIOR FILING DATE: 2000-08-03 PRIOR APPLICATION NUMBER: US 60/224,309 FRIOR FILING DATE: 2000-08-10 PRIOR APPLICATION NUMBER: US 60/226,728 FRIOR FILING DATE: 2000-08-10 PRIOR APPLICATION NUMBER: US 60/226,728 FRIOR FILING DATE: 2000-08-10 PRIOR APPLICATION NUMBER: US 60/226,728 FRIOR FILING DATE: 2000-08-10 PRIOR APPLICATION NUMBER: US 60/226,728 FRIOR FILING DATE: 2000-08-10 PRIOR APPLICATION NUMBER: US 60/226,728 FRIOR FILING DATE: 2000-08-30	Qy 1441 AGCANGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCAGAGGTCCCTTTTA 1500

```
S
                                                                                                                                                                                                                                                                                                    망
                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; PRIOR APPLICATION NUMBER: US 60/231,366
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 20
; SOFTWARE: PERL Program
; SEQ ID NO 17
; LENGTH: 3766
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; PRATURE: misc_feature
; OTHER INFORMATION: Incyte ID No. US20040058341A1 7480570CB1
US-10-343-357-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 1993; Conserv
                                                                                                                1198
                                                                                                                                                             1138
                                                                                                                                                                                                            1078
                                                                                                                                                                                                                                                         1018
                                          781
                                                                                                                                      661
                                                                                                                                                                                    601
                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                     958
                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                  868
                                                                                                                                                                                                                                                                                                                                                                                               838
                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                              778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                              CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCCTATCGCCTACATCATG
                  ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                      ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                    CAGCAGAATGGGATTGGTTAATGTGTTAAATGCCAGCAATACCTGTCCAAAAGCCTGACTTT
                                                                                                                                                                                                                   CAGCAGAATGGGATTGGTTATATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                   CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAACGAGGTGATA
                                                                                                                                                                                                                                                                                                             ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                            CTTGCAGGTGGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                         CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                         GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                a CT CTA GT C CCTA C CTG CATTT CT CAG C CTTG C TTA C CTG TTG C CAA CATTG G G C CAA C C
                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACAAAGTGTTAATTACAGAGCTCATCCAGCGATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGGCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Score 1991.8; 
; Pred. No. 0; 
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                  1377
                                                                                                                                                                                                                                                                          540
                                                              1317
                                                                                                            1257
                                                                                                                                                          1197
                                                                                                                                                                                                       1137
                                                                                                                                                                                                                                                   1077
                                                                                    780
                                                                                                                                  720
                                                                                                                                                                                                                                                                                                 1017
                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                             957
                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                          897
                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                         837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
    Ś
                         용
                                        5
                                                                밁
                                                                                          δ
                                                                                                                    밁
                                                                                                                                      δ
                                                                                                                                                              밁
                                                                                                                                                                                      Ś
                                                                                                                                                                                                              밁
                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                            1801
    1921
                                                                        2338
                                                                                                                     2278
                                                                                                                                           1741
                                                                                                                                                                  2218
                                                                                                                                                                                                                 2158
                                                                                                                                                                                                                                     1621
                                                                                                                                                                                                                                                              2098
                                                                                                                                                                                                                                                                                    1561
                                                                                                                                                                                                                                                                                                                                                       1978
                                                                                                                                                                                                                                                                                                          2038
                                                                                                                                                                                                                                                                                                                                1501
                                                                                                                                                                                                                                                                                                                                                                                                     1918
                                                                                                                                                                                                                                                                                                                                                                             1441
                                                                                                                                                                                                                                                                                                                                                                                                                          1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                   CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAA 1860
                                                                                                                             GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG 1800
 AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                    AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGGAGCATCATGTCAGAGAAC
                                                                                                                 GCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                           TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                      TCTCCACTGCATCGAAGTGGGAGGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                            TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                         CTTTCCACCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                         CTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCCTGGCCTTGAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                    TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                             GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                  AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                 GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCTATGCCAGTTCTCCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGTGGGCTGCACCTGTCCGCAGACAGACAGACAGACAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                              CTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
. 1980
                                                                                                                 2337
                                                                                                                                                                2277
                                                                                                                                                                                    1740
                                                                                                                                                                                                            2217
                                                                                                                                                                                                                                   1680
                                                                                                                                                                                                                                                          2157
                                                                                                                                                                                                                                                                                1620
                                                                                                                                                                                                                                                                                                       2097
                                                                                                                                                                                                                                                                                                                            1560
                                                                                                                                                                                                                                                                                                                                                   2037
                                                                                                                                                                                                                                                                                                                                                                                                 1977
                                                                                                                                                                                                                                                                                                                                                                                                                       1440
                                                                                                                                                                                                                                                                                                                                                                                                                                              1917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
```

S 밁 Ś В S Дb Ś 밁

중 유

Oy 421 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTACCTGTTGCCAACATTTGGGCCAACC	Oy 301 GACTGTTTTCTCACTGTACTTCTGGGTAAACTTGGAGAGAGGTCCAACTTCTACTTCTGTTCACCTG 360	81 64 41 24	OY 1 AGIGSAACAGAAAAGICCIGTAATICATAGCGGCCATTIGIGGAATACAATAC	Best Local Similarity 99.9%; Pred. No. 0; Matches 1993; Conservative 0; Mismatches 2; Indels 0; Gaps 1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA		APPLICANT: Bristol-Myeers Squibb Company TITLE OF INVENTION: IDENTIFICATION OF GENES FOR PREDICTING ACTIVITY OF COMPOUNDS THAT TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS FILE REFERENCE: D0273 NP CURRENT APPLICATION NUMBER: US/10/648,593 CURRENT APPLICATION NUMBER: 60/406,385		Db 2458 AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 2517 Oy 1981 ATCATTGAGGTCTCC 1995
8 8 8 8 8	ν ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο	\$ \$ \$ \$ \$	אס שם אס	Q	\$ \$ \$ \$ \$	B & B &	D 09 Db	Qy Db
1501 TCTCCACTGCATGGAGGTGGAGGACCATTACCACACCAGCTTCTTTTCGC 1560			1324 AGTGGGCTGCACCTGTCCGAAACAAGCCTGAAAAACAAAAAACCCTAAAAACCCTACAAAAAAAA	1204 TGTGCCGÁCTCTGCTÁCCTCAGÁGGCÁGCÁGCÁGGÁCCAAGGCCCGTGCAAGCGTGCCÁGCCÁGCGTG 1263 1081 CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGGTAGAGGACAAGCCGCTGGTACAGGCGCTC 1140	901 CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCAGCTGCACCTGGAGAAGCCAAAT 960 901 CAGACTGGAGCATCAGGGCCAAAGAGCCAAACTCAGCTGCTGCACCTGGAGAAGCCCAAAT 960 901 CAGACTGGAGCATCAGGGCCAAAAGAGCCAAACTCAAGCTGCTGCTGCACCTGAAT 1143 961 GAACCTGTCCCTGCTGTCTCAGAGGGTAGACAGAAAAGCGAGACGCCCCCTCAGTCCACCC 1020	AAGAGGATGGACATGTCTTTAGATGAAGACTTACAGATTTGTGAAAGAAA	844 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCCAAAAAGCCTCCAATGGATGTGTT 903 721 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG 780	601 ATCCCCGAGTCTCATTTCCTGCGTGTGGCTGTGAATGACAGCTTTTGTGAGAAAATTTTTG 660

Query Match 99.8%; Score 1991.8; DB 18; Length 5145; Best Local Similarity 99.9%; Pred. No. 0; Matches 1993; Conservative 0; Mismatches 2; Indels 0; Gaps 0; Matches 1993; Conservative 0; Mismatches 2; Indels 0; Gaps 0; 1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA 60	S - 11	; LENGTH: 5145 ; TYPB: DNA ; ORGANISM: Homo sapiens ; FRATIDE.	PRIOR NUMBER SOFTWA SEQ ID		; PRIOR APPLICATION NUMBER: 60/207,454 ; PRIOR APPLICATION NUMBER: 60/207,454 ; PRIOR APPLICATION NUMBER: 60/211,314	PRIOR PELLING DATE: 2003-02-16 PRIOR APPLICATION NUMBER: 60/183,319 PRIOR FILING DATE: 2000-02-17 PRIOR APPLICATION NUMBER: 60/189,862	CURRENT APPLICATION NUMBER: US/10/357,930 CURRENT FILING DATE: 2003-02-04 PRIOR APPLICATION NUMBER: 09/785,276	; APPLICANT: MODARAN, JOHN ; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR ; TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF ; TITLE OF INVENTION: HUMAN PROSTATE CANCER	MATION: chlegel. Endege, V	RESULT 13 US-10-357-930-20824 Sequence 20824, Application US/10357930	Oy 1981 ATCATTGAGGTCTCC 1995	QY 1921 AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGCTTTTCGGGCAGCATGGAA 1980	1861 2044	Qy 1801 CAGAAGCCAAGTGACAGAGCTGACTCGCGGGGGGAGCTGGCATGAAGAGAGCCCCTTTGAA 1860 	QY 1741 GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG 1800	QY 1681 ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT 1740
Q D Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	Qy Db	유 정	D Q	D Q	Qy dd	B 84	<i>당 </i>	QY db	D QY	Qу	ОУ	B &	B &	QQ QQ	dg VQ	Qy Db
1021 TETECCGACTCTGCTACCTCAGAGGCAGCAGACAAAGGCCCGTGCATCCCGCCAGCGTG 1080	GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCTCAGTCCACCC	901 CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT 960 	841 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGATTAAGAAC 900 	781 AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	721 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG 780	661 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT 720 	601 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 660 	541 CAGCAGAATGGGATTGGTTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT 600 	481 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540 	421 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 480	361 CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC 420	301 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 360 	241 TGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	181 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT 240 	121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 180 	61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 120

```
RESULT 14

US-10-357-930-20969

JSequence 20969, Application US/10357930

Publication No. US20040259086A1

GENERAL INFORMATION:
APPLICANT: Schlegel. Robert
APPLICANT: Endege, Wilson

APPLICANT: Monahan, John

APPLICANT: Monahan, John

TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS INTELL OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND TITLE OF INVENTION: HUMAN PROSTATE CANCER

FILE REFERENCE: MRI-007BCN

CURRENT APPLICATION NUMBER: US/10/357,930
                                                                                                                                                                                                   밁
                                                                                                                                                                                                                   ક
                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                       ঠ 🔓 ঠ
                                                                                                                                                                                                                                                                                                                                                     음 성
                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                         2449
                                                                                                                                                                                                                                                                                                                                                            2389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1201
                                                                                                                                                                                                                      ATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                      AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAAGAGAGCATCATGTCAGAGAAAC 1920
                                                                                                                                                                                                   ATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                       AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 1980
                                                                                                                                                                                                                                                                                                                                                                            GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTTCCACCAGCAGCAGCACCTCACGAAGTCTGGCTGGCCTTGAGGGCTTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTCCACTGCATCGAAGTGGGAGGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGCTATGCCAGTTCTCCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                        AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                          CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                              GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCCTCAAGCGTTCCTTC
                                                                                                                                                                                                                           1995
                                                                                                                                                                                                   2583
                                          FOR
                                                                                                                                                                                                                                                                                                                                                                                      1860
                                                                                                                                                                                                                                                       2568
                                                                                                                                                                                                                                                                                                                                                            2448
                                                                                                                                                                                                                                                                                                                                                                                                                                        1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1260
                                                                                                                                                                                                                                                                                                        2508
                                                                                                                                                                                                                                                                                                                                                                                                             2388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1788
                                          ဝှု
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR FILING DATE: 2003-02-16
PRIOR FILING DATE: 2003-02-16
PRIOR FILING DATE: 2000-02-17
PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR FILING DATE: 2000-03-16
PRIOR FILING DATE: 2000-05-25
PRIOR FILING DATE: 2000-06-09
PRIOR FILING DATE: 2000-06-09
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR PILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FASTSEQ for Windows Version (
SEQ ID NO 20969
LENGTH: 5145
TYPE: DNA
ODCANTEM: HORM SADIENS
             Ś
                                        뭉
                                                          ð
                                                                                          밁
                                                                                                           S
                                                                                                                                     8
                                                                                                                                                                  S
                                                                                                                                                                                                밁
                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                       $
                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                          뮍
                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; ORGANISM: Homo sapiens; FEATURE; NAME/KEY: misc feature; LOCATION: 1, 5144, 5145; OTHER INFORMATION: n = A,T,C US-10-357-930-20969
                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 1993;
                                        1129
                                                                                            1069
                                                                                                                                              1009
                601
                                                                  541
                                                                                                                    481
                                                                                                                                                                       421
                                                                                                                                                                                                 949
                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                     688
                                                                                                                                                                                                                                                                                                        829
                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                            769
                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                             709
                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               بر
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                            CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                       CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                            GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                        GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA
                                                                                                                                                                                                CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                          CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                    CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCCTGACTTT
                                                                                           CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                     GACTGI
                                                                                                                                                                                                                                                                                                                                                            GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                              CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                      99.8%;
ilarity 99.9%;
Conservative
                                                                                                                                                                                                                                                     ICTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Score 1991.8; ; Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                        1188
                                                                  600
                                                                                           1128
                                                                                                                                              1068
                                                                                                                                                                                                 1008
                660
                                                                                                                                                                       480
                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      648
                                                                                                                                                                                                                                                     948
                                                                                                                                                                                                                                                                                                        888
                                                                                                                                                                                                                                                                                                                                                            828
                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                             768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6
```

음 성

음 성 음 성

 1681 ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT 1740
209
 561 C
1501 TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC 1560
 1441 AGCAAGCGATTGCATTCGGTCAGAACCAGGAGCAGTGGCACCGCCCAGAGGTCCCTTTTA 1500
 1381 GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG 1440
1321 AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCCGAAGCAGACTCCCGAAACCAGTCCT 1380
 1261 TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC 1320
1201 TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC 1260
 1141 AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC 1200
1081 CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTXGAGGACAGCCCGCTGGTACAGGCGCTC 1140
 1021 TGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG 1080
 961 GAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC 1020
29
781 AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA
21 CTA 09 CTA
661 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT 720
89 AT

8 8 8 8 8 8 8

음 성

용 성 음 성

유

8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

```
RESULT 15

(WS-10-357-930-21071

(Sequence 21071, Application US/10357930

(Publication No. US20040259086A1

(Publication No. US20040259086A1

(GENERAL INFORMATION:

APPLICANT: Schlegel. Robert

APPLICANT: Endege, Wilson

APPLICANT: Endege, Wilson

APPLICANT: Monahan, John

TITLE OF INVENTION: HOWEL GENES, COMPOSITIONS, KITS, AND METHODS FOR

TITLE OF INVENTION: HOWAN PROSTATE CANCER

FILE REFERENCE: MRI-0079CN

CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT FILING DATE: 2003-02-04

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/189,862

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/271,314

PRIOR APPLICATION NUMBER: 60/271,314

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/271,314

PRIOR APPLICATION NUMBER: 60/271,314
                                                                                                                                                                                                                                                                                        ; TYPE: DNA; ; GAGANISM: Homo sapiens; FRATURE; FRATURE; misc feature; LOCATION: 1, 5144, 5145; COTHER INFORMATION: n = A, US-10-357-930-21071
                                               Ş
                                                                                                   닭
                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        日
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                       Query Match 99.8
Best Local Similarity 99.9
Matches 1993; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 62232
SOFTWARE: PastSEQ for Windows Version
SEQ ID NO 21071
LENGTH: 5145
         649
                                                                                                     589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1741
                                                    61
                                                                                                                                                Н
AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACAATCC 120
                                                                                         ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA 648
                                                                                                                    ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCATTGAGGTCTCC 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                              99.8%;
                                                                                                                                                                                                                                                                                                                 A, T, C or
                                                                                                                                                                                       ; Score 1991.8; ; Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                 G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4.0
                                                                                                                                                                                                                                       DB 18; Length 5145;
                                                                                                                                                                                       2;
                                                                                                                                                                                       Indels
                                                                                                                                                                                       <u>,,</u>
                                                                                                                                                                                       Gaps
  708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1800
                                                                                                                                                                                       0
```

669 CCCAGCGTGCCAGCGTGCAGCCGTGGTAGAGACAGCCGTGTACAGGGGGT 141 AGTGGGCTGCACCTGTCCGCAGACAGCGTGGAAGACAGCAATAAGCTCAAGCGTTCCTT	1021 TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG 1080	961 GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGACGCCCCTCAGTCCACCC 1020		41 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATIJ	781 AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	721 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCCTATCGCCTACATCATG 780	661 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT 720 	601 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 660 	541 CAGCAGAATGGGATTGGTTATATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT 600 	481 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540 	21 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAI	361 CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAAATCC 420 	301 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 360 	241 TGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	181 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT 240 	
172 120 178	108 166 114	102	960 154	900 148	840 142	780 136	72 13	660 124	600 118	540 112	106	100	36 94	30	4 0	76

Oy 19	Qy 19 Db 25	Qy 186 Db 244	Qy 18 Db 23	Qy 174 Db 232	Qy 16 Db 22	Qy 16 Db 22	Qy 156 Db 214	Qy 150 Db 208	Qy 144 Db 202	Qy 13 Db 19	Qy 13 Db 19	Qy 126 Db 184	Qy 12 Db 17	
18	21 09	φ μ	68	9	69	21 09	61 49	01	9 1	69	21 09	9 1	01 89	
CATTGA	AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 	AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC 	CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAA 	GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG 	ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT	TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCIGGTATTTTGCC	CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC 	TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC	AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA 	GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG	AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT	TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC	TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC	
ATCATTGAGGTCTCC	GGAAGA GGAAGA	TAAACG TAAACG	AAGTGA AAGTGA	CTGCAG	CTCACA	CITGGC	CAGCCA CAGCCA	GCATCG 	ATTGCA	GGAAGO GGAAGO	CCAGTI	AGAAGA AGAAGA	TATCAA TATCAA	
C 1995	GCTGGG	CAGAAG CAGAAG	CAGAGG CAGAGG	CCAGCT	CTTCTA	CCCCA	GCAGCA GCAGCA	AAGTGG AAGTGG	TTCGGT	CAGCAT	CTCCCC	IGCITI IGCITI	ATCAGT	
	GAAAGT GAAAGT	CIGCCA	TGACTO	GCCCAC GCCCAC	CTCTGC	GACCTO	CCTCAC	GAGCGT	CAGAAC	(CCCC)	TGTTCA	GGAATA GGAATA	TTCATA	
	GGGCAG	AATGGA AATGGA	GCGGCG	TTGCGG	CTCAGO	TACCCC	GAAGTO GAAGTO	GGAGGA GGAGGA	CAGCAG	GAAGCT	GGAACT	CTACA	TTCAGO	
	TCAGTO	ATTTGG	GAGCTG	AGACCA AGACCA	CATCTA	TTCCCT	TGCTGG	CAATTA	CAGTGG	GCAGAC GCAGAC	ATCGGA	ACCITO	CAGCAT	
	TAGCTT	AGAGAG AGAGAG	GCATGI GCATGI	AGTCT/ AGTCT/	.CGGAGG	GACCAC		CCACAC	CACCGC) 	GCAGAC GCAGAC	CACTAC	GGCAGO	
	TICGG	CATCA	AGAGA(AGAGA(ATTOTO	CAGTG	CAGCTO	SCCTTA	CAGCT	CCAGA	GCCTT	10000 11111	TCTGG	ATCCT	
	GCAGCA	TGTCAG	SCCCCT	TGCGCA	CAGTT	GTATT	AGGGCT	TCCTTT	GTCCC	CAGACA CAGACA	NAACCA NAACCA	ATGGGA	TACATG	
		AGAAC AGAAC	TTGAA TTGAA	66666 66666 66666		TIGCC	GGCAC GGCAC	10000 10000 10000	TTTTA	GCCAG GCCAG	GTCCT	CCAAC	GCTTC	
	1980 2568	1920 2508	1860 2448	1800 2388	1740 2328	1680 2268	1620 2208	1560 2148	1500 2088	1440 2028	1380 1968	1320 1908	1260 1848	

Search completed: February 15, 2005, 15:52:32 Job time : 1221.22 secs

This Page Blank (uspto)

```
Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8g
                 902.8

902.8

364.2

24.6

27.3

11.87.8

1106.8

1106.8

106.8

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Issued_Patents_NA:*

1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*

2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*

3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*

4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*

5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*

6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1202784 seqs, 818138359 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IDENTITY NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pebruary 15, 2005, 02:21:00; Search time 163.961 Seconds (without alignments) 9041.598 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-029-345A-108_COPY_538_1443
                 440.4
322.5
322.5
224.6
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
111.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.8
11.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            atggcccatgagatgattgg.....agaagattaagaaccagact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Copyright
              GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
       US-09-816-494-3
US-09-816-494-1
US-09-920-668-3
US-09-949-016-3250
US-09-513-999C-384
US-09-513-999C-384
US-09-513-999C-384
US-09-513-999C-384
US-09-513-999C-384
US-09-52-146-3
US-09-949-016-4617
US-09-949-016-2655-946
US-09-949-016-2655-347
US-09-023-655-347
US-09-702-705-801
US-09-702-705-801
US-09-761-124B-801
US-09-614-124B-801
US-09-614-124B-801
US-09-614-124B-804
US-09-618-824-804
US-09-658-824-804
US-09-589-184-804
US-09-658-824-804
US-09-589-184-804
US-09-658-824-804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2405568
Sequence 3, Appli
Sequence 1, Appli
Sequence 3, Appli
Sequence 3250, Ap
Sequence 2877, Ap
Sequence 91, Appli
Sequence 1647, Ap
Sequence 17, Appli
Sequence 1877, Ap
Sequence 1877, Ap
Sequence 11, Appli
Sequence 9165, Ap
Sequence 9165, Ap
Sequence 801, App
Sequence 804, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Description.
                                                                           밁
                                                                                                                                        Ś
                                                                                                                                                                                                                       뭐
                                                                                                                                                                                                                                                                         र्
                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 1
US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
                                                                                                                                                  301
                 361
                                                                                  301
                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62
              CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
```

45	44	43	42	41	40	39	38	37	36	35	34	ω	32	ω μ	30	29	28
90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
2109	2109	2109	2109	2109	2109	2064	2064	2064	2064	2064	2064	1238	1238	1238	1238	1238	1238
4.	4.	4.	4.	4.	4.	4	4	4	4.	4	4	4.	4	4	4	4	4
US-09-658-824-826	US-09-589-184-826	US-09-671-325-826	US-09-614-124B-826	US-09-736-457-826	US-09-702-705-826	US-09-658-824-825	US-09-589-184-825	US-09-671-325-825	US-09-614-124B-825	US-09-736-457-825	US-09-702-705-825	US-09-658-824-803	US-09-589-184-803	US-09-671-325-803	US-09-614-124B-803	US-09-736-457-803	US-09-702-705-803
Sequence 826,	Sequence 826,		Sequence 826,	Sequence 826,	Sequence 826,		Sequence 825,	Sequence 825,	Sequence 825,	Sequence 825,	Sequence 825,	Sequence 803,	Sequence 803,	Sequence 803,	Sequence 803,	Sequence 803,	Sequence 803,
App	App	App	App	App	App	App	App	App	Ąpp	Αpp	App	App	App	App	App	App	App

ALIGNMENTS

```
Sequence 3, Application US/09816494
Patent NO. 6664089
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUF
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND
CURRENT FILING DATE: 2001-03-23
CURRENT FILING DATE: 2001-03-23
FRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FastSSQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 1998
TYPE: DNA
ORGANION: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 904; Conservative
                                                                                                                                                                                                                    181 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                 121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                           61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                           GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                      GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                           CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 902.8; DB 4;
Pred. No. 5e-308;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DUAL SPECIFICITY AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
```

300

240 240 180 180 120 120

60

0

60

768

708

```
SEQUENCE 1. Application US/09816494
PATENT NO. 6664089
GENERAL INFORMATION:
APPLICANT: MEYERS, RACHEI A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUA
TITLE OF INVENTION: 9HOSPHATASE MOLECULES AND
FILE REFERENCE: 10448-030002
CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1
LENGTH: 3544
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (589)...(2583)
US-09-816-494-1
           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                    밁
                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 2
US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                        Query Match 99.6
Best Local Similarity 99.8
Matches 904; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
       AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                ATGGCCCATGAGATGGTTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGACT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACTOTAGTOCOTACOTGCATTTOTOAGCOTTGCCTTACOTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                      99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ITTAGATGAAGCTTACAGATTTGTGAAAGAAAAAAAGACCTACT
                                                                                     Score 902.8; DB 4;
Pred. No. 7.7e-308;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                         DUAL SPECIFICITY AND USES THEREFOR
                                                                                                                Length 3544;
                                                                                        Indels
                                                                                       0
                                                                                    Gaps
        120
                                 648
                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                     0
Fequence 3, Application US/09920668
Fatent No. 648264
Featent NO. 648264
FEATENT INFORMATION:
APPLICANT: Lex M. Cowsert
APPLICANT: Brett P. Monia
TITLE OF INVENTION: ANTISENSE MODULATION OF DUFILE REFERENCE: RTS-0246
CURRENT APPLICATION NUMBER: US/09/920,668
CURRENT FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 49
                                                                                                                                                      RESULT 3
US-09-920-668-3
                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                              1489
                                                                                                                                                                                                                                                                   1429
                                                                                                                                                                                                                                                                                                                          1369
                                                                                                                                                                                                                                                                                                                                                                                1309
                                                                                                                                                                                                                                                                                                                                                                                                                                     1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1009
                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                             CAGACT 1494
                                                                                                                                                                                                                                       CAGACT 906
                                                                                                                                                                                                                                                                                      ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                                                                                     CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCATCGCTATCGCCTATCATCATCATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                CCGTGGTTGGACAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAAGCCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                            CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                   CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGCAGAATGGGATTAGTTATATATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DUAL
                                                                    SPECIFIC
                                                                   PHOSPHATASE 8
```

1488 900 1428 840 1368

EXPRESSION

1308

780

720

1248

660

1188

600

1068

1008

420 948 360 888 300

```
8
                                                                                                                                                                                                           당
                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ई
                 ક
                                                   밁
                                                                      ર્શ
                                                                                                밁
                                                                                                                                                       밁
                                                                                                                                                                                8
                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                        음 성
                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-920-668-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 64.5%;
Matches 563; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo mapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (135)...(2012)
1005
                         865
                                                                                                          885
                                                                                                                                                               825
                                                                                                                                                                                                                     765
                                                                                                                                                                                                                                                                                                    565
                                                                                                                                                                                                                                                                                                                                645
                                                                                                                                                                                                                                                                                                                                                            505
                                                                                                                                                                                                                                                                                                                                                                                       585
                                                                                                                                                                                                                                                                                                                                                                                                                 445
                                                                                                                                                                                                                                                                                                                                                                                                                                             525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         225
                                                                              805
                                                                                                                                   745
                                                                                                                                                                                        589
                                                                                                                                                                                                                                                                          705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       28
                                                                                                                                                                                                                                                                                                                                               GGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAGCAGAATGGGATTGGTTATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCACT---CTAGTCCCTACCTGCATTTCT
GGCCAGCTGCTGGAGTACGAGCGCACGCTGAAG 1037
                                                                                                                                                                                                                                                                          CTCAACGCCAGCAACTCCTGCCCCAAGCCTGACTTCATCTGCGAGAGCCGCTTCATGCGG
                                                                                                                                                                                                                                                                                                  TTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCATTTCCTGCGT
                                                                                                                                                                                                                                                                                                                                                                                                               CAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCGAATTCTTCCCAATCTTTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTGCTTCCCCGGCCTCTGCGAGGGCAAGCCTGCTGCCCTGCTACCCATGAGCCTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCTGGACGGCTGCTTCGACAGCGTGGCCATCCTCACTGGGGGCTTCGCCACCTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACAGCCGCTCCTTCGTGGAGTACAACAGCTGGCATGTGCTCAGCTCCGTCAACATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GATAGCCGGCCATTIGTGGAATACAATACATCCCCACATTITGGAAGCCCATTAATATCAAC 147
                 GGCCAACTCCTGGACTATGAGAAGAAGATTAAG
                                                   GACGCCTACAGGTTCGTGAAGGACAGGCGCCCGTCCATCTCGCCCAACTTCAACTTCCTG
                                                                       GAAGCTTACAGATTTGTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTG
                                                                                                          TCCCGCTCTGCCACCATCGCCATCGCCTACATCATGAAGACCATGGGCATGTCCTCCGAC
                                                                                                                      TCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTTTAGAT
                                                                                                                                                                                        TTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATC
                                                                                                                                                                                                                     GTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTGCCGTGGTTGGACAAATCAGTAGAT
                                                                                                                                                                                                                                                                                                                                GGCTCGCAGAAGGACGTCCTAAACAAGGATCTGATGACGCAAAATGGAATAAGCTACGTC
                                                                                                                                                                                                                                                                                                                                                                                      CAGCCCTGCCTGTGCCCAGCGTGGGCCTGACCCGCATCCTGCCTCACCTCTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAAGCTCCCAAGATGTTGCCTCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCCGGCTGCACGCAGCCAGGTGGAGGCTACGGAGCCACAGGACGTGGTGGTCTATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGCATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATC
                                                                                                                                                             CAGAGCACGCGGGACGCCAGCGTGCTGGCCGCAGACAGCTTCCTCCATCCTGCTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGCTCCAAGCTGGTGAAGCGGCGGCTGCAGCAGGGCAAGGTGACCATTGCGGAGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAAAGTGGAAACGGGAAAAAGTGCTGCTAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  >Score 365.8; DB 4;
Pred. No. 6.1e-118;
0; Mismatches 307;
                        897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2377;
                                                                              864
                                                                                                                                     804
                                                                                                                                                                                                                                               684
                                                                                                                                                                                                                                                                                                     624
                                                                                                                                                                                                                                                                                                                                                            564
                                                                                                                                                                                                                                                                                                                                                                                                                 504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                524
                                                                                                          944
                                                                                                                                                               884
                                                                                                                                                                                        744
                                                                                                                                                                                                                     824
                                                                                                                                                                                                                                                                                                                               704
                                                                                                                                                                                                                                                                                                                                                                                      644
                                                                                                                                                                                                                                                                                                                                                                                                                                            584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         284
```

```
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR FILING DATE: 2000-10-03
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3250
LENGTH: 2351
TYPE: DNA
ORGANISM: Human
US-09-949-016-3250
묽
                      S
                                                      밁
                                                                               δ
                                                                                                                  닭
                                                                                                                                              S
                                                                                                                                                                                   밁
                                                                                                                                                                                                        S
                                                                                                                                                                                                                                      당
                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 4
US-09-949-016-3250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: VENTER, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3250, Ap
Patent No. 681233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS FILE REFERENCE: CL001307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Sin
les 562;
                             625
                                                                                          565
                                                                                                                                                    505
                                                                                                                                                                                   559
                                                                                                                                                                                                                 445
                                                                                                                                                                                                                                                499
                                                                                                                                                                                                                                                                             388
                                                                                                                                                                                                                                                                                                                                                                         379
                                                           679
                                                                                                                         619
                                                                                                                                                                                                                                                                                                             439
                                                                                                                                                                                                                                                                                                                                          328
                                                                                                                                                                                                                                                                                                                                                                                                      268
                                                                                                                                                                                                                                                                                                                                                                                                                                      319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             28 ATTGTTACTGAGAGGTTGGTGGCTCTGCTAGTAGTGGAAAGTGGAAAAAGTGCTGCTAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATAGCCGGCCATTTGTGGAATACAATACAATCCCCACATTTTGGAAGCCATTTAATATCAAC
 GTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTTGCCGTGGTTGGACAAATCAGTAGAT 684
                                                                             TTAAATGCCAGCTATACCTGTCCAAAAGCCTGACTTTATCCCCGAGTCTCATTTCCTGCGT
                                                                                                                                         GGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAGCAGAATGGGATTGGTTATGTG
                                                                                                                                                                                                         CAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCGAATTCTTCCCCAATCTTTATCTT
                                                                                                                                                                                                                                                  rccrecrirecedecererecedesecedesecrecrecrecrecracecareaecrerec
                                                                                                                                                                                                                                                                   CGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCACT---CTAGTCCCTACCTGCATTTCT
                                                                                                                                                                                                                                                                                                                                         ANACTEGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                        CAAAGCTCCCAAGATGTTGCCTCTCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGCATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACAGCCGCTCCTTCGTGGAGTACAACAGCTGGCATGTGCTCAGCTCCGTCAACATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCAACGCCAGCAACTCCTGCCCCAAGCCTGACTTCATCTGCGAGAGCCGCCTTCATGCGG
                                                                                                                         GGCTCGCAGAAGGACGTCCTAAACAAGGATCTGATGACGCAAAATGGAATAAGCTACGTC
                                                                                                                                                                                    CAGCCCTGCCTGTGCCCAGCGTGGGCCTGACCCGCATCCTGCCTCACCTCTACCTG
                                                                                                                                                                                                                                                                                                             AAGCTGGACGGCTGCTTCGACAGCGTGGCCATCCTCACTGGGGGGCTTCGCCACCTTCTCC
                                                                                                                                                                                                                                                                                                                                                                         CAGAGCACGCGGÁCGCCAGCGTGCTGGCCGCÁGÁCAGCTTCCTCCATCCTGCTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGCCGGCTGCACGCAGGTGGAGGCTACGGAGCCACAGGACGTGGTGGTCTATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    40.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/09949016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 364.2; DB 4;
Pred. No. 2.2e-117;
0; Mismatches 308;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ASSOCIATED
OF DETECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                           438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             198
                                                           738
                                                                                                                         678
                                                                                                                                                      564
                                                                                                                                                                                    618
                                                                                                                                                                                                                                                                               444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            87
                                                                                                                                                                                                                                                  558
                                                                                                                                                                                                                                                                                                               498
                                                                                                                                                                                                                                                                                                                                          387
                                                                                                                                                                                                                                                                                                                                                                                                        327
                                                                                                                                                                                                                                                                                                                                                                                                                                        378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              147
```

```
J.B.

....LICANT: Duclert, A.

TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.

FILE REFERENCE: 59.US2.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR FILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 2877
LENGTH: 333
TYPE: DN7
TOD: DN7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
 Query Match
Best Local Similarity
                                             OTHER INFORMATION: Xaa=His or -09-513-999C-2877
                                                                        LOCATION:
                                                                                     NAME/KEY: UNSURE
                                                                                                               OTHER INFORMATION: w=a
                                                                                                                              FEATURE:
NAME/KEY: misc_feature
LOCATION: 237
                                                                                                                                                                                      NAME/KBY: misc_feature
LOCATION: 58
                                                                                                                                                                                                                        LOCATION: 36
OTHER INFORMATION: n=a,
                                                                                                                                                                                                                                                 NAME/KEY: misc_feature
                                                                                                                                                                      OTHER INFORMATION: r=a or
                                                                                                                                                                                                                                                                                                                                LOCATION: 18
OTHER INFORMATION: y=c or t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                              OTHER INFORMATION: k=g
                                                                                                                                                                                                                                                                                                                                                                                         LOCATION: 17
OTHER INFORMATION: h=a or
                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: CDS
LOCATION: 127..333
                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: misc_feature
LOCATION: 17
                                                                                                                                                                                                                                                                                                         AME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                AME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                  EATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    865 GGCCAACTCCTGGACTATGAGAAGAAGAATTAAG 897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACGCCTACAGGTTCGTGAAGGACAGGCGCCCGTCCATCTCGCCCAACTTCAACTTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAAGCTTACAGATTTGTGAAAGAAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCCGCTCTGCCACCATCGCCATCGCCTACATCATGAAGACCATGGGCATGTCCTCCGAC 918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCCAGCTGCTGGAGTACGAGCGCAGCCTGAAG 1011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTTTAGAT 804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATC 744
 32.5%;
                                                                                                               ဝင္ပ
                                                                                                                                                                                                                                                                                 or
                                                                                                                                                                                                                         9
                                                                                                                                                                    g
                                                                                                                                                                                                                           ი
                                                                                                                                                                                                                                                                                                                                                                                            O
                                                                                                                                                                                                                                                                                                                                                                                            8
Score 294.6; DB 4;
Pred. No. 2.2e-93;
                                                                                                                                                                                                                           or
t
                                                       Gln
                                                                                                                                                                                                                                                                                                                                                                                            d
           Length
           333;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              858
```

```
RESULT 6
US-09-016-434-91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뭕
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PATENTION: 650093.

GENERAL INFORMATION:
APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Seilhamer
APPLICANT: OF INVENTION: COMPOSITION FOR THE DETECTION
MITTING OF INVENTION: PATHWAY GENE EXPRESSION
1490
STRANGE TOPOLOGY: 11100 INMEDIATE SOURCE: LIBRARY: LUNGFET03
                                                                                                                                TELEPAX: (650) 845-416
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                        CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0
TELECOMUNICATION INFORMATION:
TELEPHONE: (650) 855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                          CLASSIETTO:

LEGELY BY COMPATIBLE

LIM PC COMPATIBLE

OPERATING SYSTEM: PC_DOS/MS-DOS

SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/016 ATTELING DATE: HERRENT***
                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                LENGTH:
                                                                                                                                                                                                                                                                                                FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: PALO ALTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                332 TGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCA 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           272 GCTCCCAAGATGTTGCCTCTCTCTCTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          239 GCTCCCAAGATGTTGCCTCTCTCTCTTCAGACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      152 CCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGC 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  326;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 34 ACTGAGAGGTTGGTGGCTCTGCTGGAAACTGGAACGG-AAAAAGTGCTGCTAATTGATAG 92
                                                                                            : 279 base pairs nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCA 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAWA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCGGCCATTTGTGGAATACCAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCGGCCATTTGTGGAATA-CAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCT 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTGAGAGGTTGGTGGHY--KCTGGAAAGTGGAACGGNAAAAAGTGCTGCTAATTGATAR 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   B: INCYTE PHARMACEUTICALS, INC. 3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                               single
                                                                                                                                                                845-4166
                                                                                                                                                                                                               PA-0002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                               ន
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIGNALING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                118
```

```
Ş
                                                         밁
                                                                                    ঠ
                                                                                                          밁
                                                                                                                                            श्च
                                                                                                                                                                               밁
                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                        NAME/KEY: misc_feature
LOCATION: 164
COTHER INFORMATION: k=g
US-09-513-999C-3684
                                                                                                                                                                                                                                                                                                                                                                                                               ; SEQ ID NO 3684
LENGTH: 378
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 7
US-09-513-999C-3684/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-016-434-91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Dunas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Giordano, J.Y.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
Patent No. 6783961
PILE REPERBNCE: 59 US2.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT APPLICATION NUMBER: US/09/513,999C
PRIOR APPLICATION NUMBER: US/09/513,999C
PRIOR APPLICATION NUMBER: US/09/513,999C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 36
Patent No.
                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 223;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: CDS
LOCATION: 216..377
                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                 378
                         224
                                                                                                                      318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      145
198
                                                           258
                                                                                       164
                                                                                                                                         104 TGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGA 163
                                                                                                                                                                                                                                             189;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                 44 TGGTGGCTCTGCTGGAAAGTGGAAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3684, Application US/09513999C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25
                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6783961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACATTITGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                 TGGTGGCTCTGCTGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
ATAAGGTAAAC 188
                           ATAAGGTTGAC 234
                                                                                         AGCGAAGGTTGCAACAGGACAAAGTGTTAAATTACAGAGCTCATCCAGCATTCAGCGAAAC
                                                                                                                      TGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24.6%;
                                                                                                                                                                                                                                                         20.7%;
                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 223; DB 4; Length 279; Pred. No. 4.1e-68;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                         Score 187.8; DB 4;
Pred. No. 1.5e-55;
0; Mismatches 2;
                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       223
                                                                                                                                                                                                                                            <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                               103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                           199
                                                                                      223
                                                                                                                    259
                                                                                                                                                                                 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      204
```

```
; LENGTH: 1830
; TYPE: DNA
; ORGANISM: Homo s
US-09-557-921-1
                                                                                                   S
                                                                                                                                      밁
                                                                                                                                                               Ś
                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                            용
                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
US-09-949-016-4617
                                                                                                                                                                                                                                                                                                                                                                                                               닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 8
US-09-557-921-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1, Application US/09557921
Patent No. 6551810
GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-10 DUAL-SI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 13.8%;
Best Local Similarity 56.7%;
Matches 251; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: FASTSEQ for Windows Version SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: 200125.416
CURRENT APPLICATION NUMBER: US/09/557,921
CURRENT FILING DATE: 2000-04-20
NUMBER OF SEQ ID NOS: 20
                                                                     1456
                                                                                                                                      1396
                                                                                                                                                                                                         1336
                                                                                                                                                                                                                                                                             1276
                                                                                                                                                                                                                                                                                                                                              1216
                                                                                                                                                                                                                                                                                                                                                                                                               1096 CTCAGGÁCCTGGACACCÁTGCÁGCGGCTGAACÁTCGGCTÁCGTCATCAACGTCÁCCACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1036 TCGAGAACGCTGAGCTCACCCCCATCTTGCCCTTCCTTGCCAATGAGCAGGATG
                                                                                                                                                                      818
                                                                                                    878
                                                                                                                                                                                                                                                                                                           869
                                                                                                                                                                                                                                                                                                                                                                              638
                                                                                                                                                                                                                                                                                                                                                                                                                                                 581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         461 TTGCCAACATTGGGCCAACCCGAATTCTTCCCAATCTTTATCTTGGCCGGCGAGGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 521 TCCTCAACAAGGAGCTGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATA
                                                                                                                                                                      TTGTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGG
                                                                                                                                                                                                                                         CCATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGAT
                                                                                                                                                                                                                                                                                                                                                                              ACAGCTTTTGTGAGAAAATTTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTGTCCAAAGCCTGACTTT---ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATG
                                                                     AGTTCGÁGGÁAGÁCCTAÁACÁAC 1478
                                                                                                    ACTATGAGAAGAAGATTAAGAAC 900
                                                                                                                                      TTGTCAAAGGCAAACGACCAATTATCTCCCCAAACCTTAACTTCATGGGGCAGTTGCTAG
                                                                                                                                                                                                                                                                             CTCACCAGTGTGGGAAGGGGCTTCTCATCCACTGCCAGGCTGGGGGTGTCCCGCCCA
                                                                                                                                                                                                                                                                                                           CAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCA
                                                                                                                                                                                                                                                                                                                                              ACAGCAACAAGCAGAACCTGCGGCAGTACTTTGAAGAGAGGCTTTTGAGTTCATTGAGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DSP-10 DUAL-SPECIFICITY PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No. 1.1e-32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches 189;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ω
•
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                      1455
                                                                                                                                                                        877
                                                                                                                                                                                                                                           817
                                                                                                                                                                                                                                                                             1335
                                                                                                                                                                                                                                                                                                           757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    580
                                                                                                                                                                                                         1395
                                                                                                                                                                                                                                                                                                                                                1275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1095
                                                                                                                                                                                                                                                                                                                                                                                697
                                                                                                                                                                                                                                                                                                                                                                                                                 1215
                                                                                                                                                                                                                                                                                                                                                                                                                                                 637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      520
```

```
US-09-949-016-4617
; Sequence 4617, Application US/09949016
; Patent No. 6812339
; Patent No. 6812339
; GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES
; FILE REFERENCE: CL001307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-03
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,768
; PRIOR APPLICATION NUMBER: 60/231,768
; PRIOR APPLICATION NUMBER: 60/231,768
```

```
Ś
                                                               밁
                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-922-146-3
; Sequence 3, Application US/09922146
; Patent No. 6566133
; Patent No. 656133
                                                                                                                                                                                                    US-09-922-146-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뭥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: DNA
; ORGANISM: Human
US-09-949-016-4617
                                                                                                                                                                                                                                                                                  APPLICANT: Lex M. Cowsert
APPLICANT: Brett P. Monia
TITLE OF INVENTION: ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 9 EXPRESSION
FILE REFERENCE: RTS-0252
CURRENT APPLICATION NUMBER: US/09/922,146
CURRENT FILLING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 48
SEQ ID NO 3
LENGTH: 2303
                                                                                                                          Query Match 11.8%;
Best Local Similarity 55.3%;
Matches 229; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 229; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 4617
LENGTH: 2283
                                                                                                                                                                                                           NAME/KEY: CDS
LOCATION: (114)...(1268)
                                                                                                                                                                                                                                                     LENGTH: 2303
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
535 CTGATACAGCAGAATGGGATTGGTTATATGTGTTAAATGCCAGCTATACCTGTCCAAA---G 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1023
                                                  723 CCTGTCCAGATCCTGCCCAACCTCTATCTGGGCAGTGCCCGGGATTCCGCCAATTTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         963 Técededrecricerceacriserredecedesereacecriterereacecricacreresee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     712 GGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCCACCATCGCTATCGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 843 TTCGAGAAGAATGGTGACTTTCACTACAAGCAGATCCCCCATCTCCGACCACTGGAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  475 CCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAG
                                                                        CCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAG 534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGTCTAACATCTCCCCCAACTTCAACTTCATGGGGCAGTTGCTGGACTTTGAG 1136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAG 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TACCTCATGCAGAAGCTCCACCTCTCTCTCAACGATGCCTATGACCTGGTCAAGAGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCCTGGCCAAACTGGGCATCCGCTACATCCTCAATGTCACCCCCAACCTCCCAAACTTC 842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AACCTGTCGCGGTTCTTTCCGGAGGCCATTGAGTTCATTGATGAGGCCTTGTCCCAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAAT 711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTGACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTTGTGAATGACAGCTTTTGTGAG 651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAA---G 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTGTCCAGATCCTGCCCAACCTCTATCTGGGCAGTGCCCGGGATTCCGCCAATTTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             11.8%;
                                                                                                                        Score 106.8; DB 4; Length 2303; Pred. No. 2.7e-26; 0; Mismatches 182; Indels 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 106.8; DB 4;
Pred. No. 2.7e-26;
0; Mismatches 182;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 2283;
                                                                                                                       ω
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ψ
                                                    782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
```

```
; LIBRARY: GENBAN;
; CLONE: g1418933
US-09-016-434-1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 11
US-09-016-434-1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent No. 6500938
                                                                                                                                                                                                                                                   TELEPHONE: (650) 855-
TELEFAX: (650) 845-41
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                     STRANDEDNESS: sir
TOPOLOGY: linear
IMMEDIATE SOURCE:
                                                                                                                                                                                                            SEQUENCE CHARACTERISTICS:
LENGTH: 2109 base pair
                                                                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION UMBER: 37,071
REFERENCE/DOCKST NUMBER: PA
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: PC DOS/MS-DOS
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION NUMBER: US/09/016,434
                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING
TITLE OF INVENTION: PATHWAY GENE EXPRESSION
NUMBER OF SEQUENCES: 1490
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: CALI
COUNTRY: US
ZIP: 94304
                                                                                                                                                                                            TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET: 3174 PORTER DRIVE
CITY: PALO ALTO
STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1083 AAGTCTAACATCTCCCCCAACTTCAACTTCATGGGGCAGTTGCTGGACTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           783 AGCCTGGCCAAACTGGGCATCCGCTACATCCTCAATGTCACCCCCAACCTCCCAAACTTC
    Similarity
                                                                                                                                                                                        nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    адасстастататстссаадсттсааттттстедессаастсстедастатдад 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ccreacritarececeaererearirecrecererecerereaareaeaeririrereae 651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TACCTCATGCAGAAGCTCCACCTCTCTCTCAACGATGCCTATGACCTGGTCAAGAGGAAG 1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCC 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACCTGTCGCGGTTCTTTCCGGAGGCCATTGAGTTCATTGATGAGGCCTTGTCCCAGAAC 962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAAGCCTCCAAT 711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTCGAGAAGAATGGTGACTTTCACTACAAGCAGATCCCCATCTCCGACCACTGGAGCCAG 902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGCGGGGTGCTCCACTGCTTGGCGGGGGTCAGCCGTTCTGTCACCGTCACTGTGGCC
                                                                                                                                                                                                         2109 base pairs
                                                                                                          GENBANK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application
                                                                                                                                                                                                                                                                                            (650) 855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HEREWITH
                                                                                                                                                                  single
                                                                                                                                                                                                                                                                        845-4166
    10.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/09016434
                                                                                                                                                                                                                                                                                                                                   PA-0002 US
Score 96.2; DB 4;
Pred. No. 1.4e-22;
                   Length 2109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               842
```

```
RESULT 12
US-09-023-655-946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 946,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patent No. 660787
                                   TELEFAX: (650) 845-416
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 31..
STREET: 31..
CITY: PALO ALTO
CTATE: CALIFORNIA
TISA
                                                                                                                                                                                                                                                                                                                                  COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Cocks, Benjamin G. APPLICANT: Susan G. Stuart APPLICANT: Jeffrey J. Seilhamer TITLE OF INVENTION: COMPOSITION TITLE OF INVENTION: EXPRESSION
                                                                                                          ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0001 US
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQUENCES:
                                                                                                                                                                                                        PILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                    CLASSIFICATION:
                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE: HEREW
                                                                                           TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE:
                 ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1099 GCAGGAGAGTTTAAATACAAGCAAATCCCCCATCTCGGATCACTGGAGCCAAAACCTGTCC 1158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   544 CAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGC---CTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  222;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTT 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAATTCGGCATCAAGTACATCTTGAACGTCACCCCCAATTTGCCGAATCTCTTTGAGAAC 1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCTTGCCCTTCCTACTTGGGCTGTGCCAAAGACTCCACCAACTTGGACGTGTTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAT 893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAAAATGAAAAATCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGTTTTTCCCTGAGGCCATTTCTTTCATAGATGAAGCCCGGGGCAAGAACTGTGGTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTGGTACATTGCTTGGCAGTAGCCGCTCAGTCACTGTGACTGTGGCTTACCTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG
2109 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/09023655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                       (650) 855-0555
650) 845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INCYTE PHARMACEUTICALS,
                                                                                                                                                                                                                                                                                                     HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1508
                                                                                                                                                                                                                                                                                                                       US/09/023,655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches 188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          THE DETECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OF BLOOD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  u
T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CELL GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
```

```
APPLICANT: UNENTEN.

APPLICANT: VENTER, J. Craig et al.

APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

FILE REFERENCE: CLOOL307

CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR FILING DATE: 2000-10-20

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SOFTMARKE: FRASISEQ for Windows Version 4.0

SEQ ID NO 2615

LENGTH: DNA

CDCANTOWN BURNER: 60/231
                                     ঠ
 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 13
US-09-949-016-2615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                      ; ORGANISM: Human US-09-949-016-2615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; CLONE: g1418933
US-09-023-655-946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2615, Ap
Patent No. 681233
                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Best Local Similarity Matches 222; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IMMEDIATE SOURCE:
LIBRARY: GENBANK
                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS: sir
TOPOLOGY: linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                   484 ATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              544 CAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGC---CTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         484 ATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG
ATCTTGCCCTTCCTACTTGGGCTGTGCCAAAGACTCCACCAACTTGGACGTGTTGGAG 1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAAATGAAAAATCCAAC 1338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACTGTGGCTTACCTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGGAGCCAAAACCTGTCC 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAATTCGGCATCAAGTACATCTTGAAACGTCACCCCCAATTTGCCGAATCTCTTTGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAGAGGACGCT 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAAGCCTCCAATGGATGTGTT 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCTTGCCCTTCCTCTACTTGGGCTGTGCCAAAGACTCCACCAACTTGGACGTGTTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGTTTTTCCCTGAGGCCATTTCTTTCATAGATGAAGCCCGGGGCAAGAACTGTGGTGTC
                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/09949016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       single
                                                                                            10.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 10.6%;
                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               <u>.</u>
                                                                         Score 96.2; DB 4;
Pred. No. 1.6e-22;
0; Mismatches 188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 96.2; DB 4;
Pred. No. 1.4e-22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Mismatches 188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 4;
                                                                                                              Length 2475;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 2109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                           Indels
                                                                           3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ω
-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              893
                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1038
```

```
Sequence 347, Application. ...,

Sequence 347, Application. ...,

Patent No. 6607879

GENERAL INFORMATION:

APPLICANT: Cocks, Benjamin G.

APPLICANT: Susan G. Stuart

APPLICANT: Jeffrey J. Seilhamer

COMPOSITION FOR TOWENTION:

COMPOSITION FOR THE STATE OF THE STAT
  US-09-023-655-347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 14
US-09-023-655-347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                              TELEPAX: (650) 845-4166
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 1208 base --
Type
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,655
FILING DATE: HEREWITH
                  IMMEDIATE SOURCE:
LIBRARY: THYRN
CLONE: 1444245
                                                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                        NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0001 US
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION:
TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
                                                                                             STRANDEDNESS:
TOPOLOGY: lin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: CALIFO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STREET: 3174 PORTER DRIVE CITY: PALO ALTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1188 GCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGGAGCCAAAACCTGTCC 1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                       nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAT 893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TIGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACTGTGGCTTACCTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAGAGGACGCT 1480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAAAATGAAAAAATCCAAC 1427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGITITICCCTGAGGCCATTTCTTTCATAGATGAAGCCCGGGGCAAGAACTGTGGTGTC 1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAATTCGGCATCAAGTACATCTTGAACGTCACCCCAATTTGCCGAATCTCTTTGAGAAC 1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGC---CTGACTTT 600
                                            THYRNOT03
                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INCYTE PHARMACEUTICALS,
                                                                                                                  single
                                                                                                                                                                                                                                         845-4166
                                                                                                                                                                                                                                                                 855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1508
                                                                                                                                                                                                                  347:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FOR THE DETECTION OF BLOOD CELL GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                   S
                                                                                                     В
                                                                                                                                              Ś
                                                                                                                                                                                                     뮹
                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                     Дb
                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-702-705-801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 15
US-09-702-705-801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent No. 650----
Patent No. 650---
Patent INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 10.4%;
Best Local Similarity 64.3%;
Matches 142; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                      724
                                                                                                     497
                                                                                                                                                      664
                                                                                                                                                                                                     437
                                                                                                                                                                                                                                                      604
                                                                                                                                                                                                                                                                                                                                                                                                        320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4
GTGCACTGCCAGGCGGCATCTCGCGGTCGGCCACCATCTGCCTGGCCTACCTGATGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Carter, Darrick
Retter, Marc
Mannion, Jane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wang, Tongtong
Bangur, Chaitanya
Lodes, Michael A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Vedvick, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Fanger, Gary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
```

```
APPLICANT: Pan, Liqun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C14
CURRENT PEPLICATION NUMBER: US/09/702,705
CURRENT FILING DATE: 2000-10-30
NUMBER OF SEQ ID NOS: 1833
SOFTWARE: FRANCEQ for Windows Version 3.0
SEQ ID NO 801
LENGTH: 1619
TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 801, Application US/09702705 Patent No. 6504010
                                                                                                                                                                                                                                                                       380 GCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAACC---ACTTTGAA 436
                                                                                                                                                                                                                                                                                                        544 CAGAATGGGATTGGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATC 603
                                                                                                                                                                                                                                                                                                                                                                                                                          484 ATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             860 TTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            800 TAGATGAAGCTTACAGATTTGTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATT 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           680 TAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTTTTTAGTGCACTGTTTAGCTG 739
GTGCACTGTTTAGCTGGGATCTCCCCGCTCCACCATCGCTATCGCCTACATCATGAAG 783
                                                                                                               ТОСТТОСАСЛАЛАТСАСТАСАТТСАТТСАСЛАЛАССАЛАЛАССТССЛАТССАТСТСТА 723
                                                                                                                                                                   GGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATCAGCTCC 496
                                                                                                                                                                                                                 CCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTTGCCG 663
                                                                                                                                                                                                                                                                                                                                                                         ATCCTTCCCTTCCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATGCTGGAC 379
                                                              TGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGCGTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCATGGGGCAGTTGCTAGAGTTCGAGGAAGACCTAAACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGACTGATGCTTATAAATTTGTCAAAGGCAAACGACCAATTATCTCCCCAAACCTTAACT 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGTGTCCCGCTCCGCCACCATCGTCATCGCTTACTTGATGAAGCACACTCGGATGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGATCTCCCGCTCCGCCACCATCGCCTATCGCCTACATGAAGAGGATGGACATGTCTT 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGAGTTCATTGAGGAAGCTCACCAGTGTGGGAAGGGGCTTCTCATCCACTGCCAGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 91.6; DB 4;
Pred. No. 4.9e-21;
0; Mismatches 189;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 94.6; DB 4;
Pred. No. 3.4e-22;
0; Mismatches 79;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          THE THERAPY AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 1619;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 1208;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                              556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1;
```

This Page Blank (uspto)

```
Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OM nucleic - nucleic search, using sw model
Published Applications NA:*

1: /cgm2_6/ptcdata/1/pubpna/US07_PUBCOMB.seq:*

2: /cgm2_6/ptcdata/1/pubpna/US06_NEW_PUB.seq:*

3: /cgm2_6/ptcdata/1/pubpna/US06_NEW_PUB.seq:*

4: /cgm2_6/ptcdata/1/pubpna/US06_PUBCOMB.seq:*

5: /cgm2_6/ptcdata/1/pubpna/US08_NEW_PUB.seq:*

6: /cgm2_6/ptcdata/1/pubpna/US08_NEW_PUB.seq:*

7: /cgm2_6/ptcdata/1/pubpna/US08_PUBCOMB.seq:*

9: /cgm2_6/ptcdata/1/pubpna/US08_PUBCOMB.seq:*

9: /cgm2_6/ptcdata/1/pubpna/US09E_PUBCOMB.seq:*

10: /cgm2_6/ptcdata/1/pubpna/US09E_PUBCOMB.seq:*

11: /cgm2_6/ptcdata/1/pubpna/US09E_PUBCOMB.seq:*

12: /cgm2_6/ptcdata/1/pubpna/US09E_PUBCOMB.seq:*

13: /cgm2_6/ptcdata/1/pubpna/US10E_PUBCOMB.seq:*

14: /cgm2_6/ptcdata/1/pubpna/US10E_PUBCOMB.seq:*

16: /cgm2_6/ptcdata/1/pubpna/US10E_PUBCOMB.seq:*

16: /cgm2_6/ptcdata/1/pubpna/US10E_PUBCOMB.seq:*

17: /cgm2_6/ptcdata/1/pubpna/US10E_PUBCOMB.seq:*

18: /cgm2_6/ptcdata/1/pubpna/US10E_PUBCOMB.seq:*

19: /cgm2_6/ptcdata/1/pubpna/US10E_PUBCOMB.seq:*

19: /cgm2_6/ptcdata/1/pubpna/US10E_PUBCOMB.seq:*

20: /cgm2_6/ptcdata/1/pubpna/US10E_PUBCOMB.seq:*

20: /cgm2_6/ptcdata/1/pubpna/US10E_PUB.seq:*

20: /cgm2_6/ptcdata/1/pubpna/US10E_PUB.seq:*

20: /cgm2_6/ptcdata/1/pubpna/US10E_PUB.seq:*

20: /cgm2_6/ptcdata/1/pubpna/US10E_PUB.seq:*

20: /cgm2_6/ptcdata/1/pubpna/US10E_PUB.seq:*

20: /cgm2_6/ptcdata/1/pubpna/US10E_PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5378673 seqs, 2950229984 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IDENTITY_NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-029-345A-108_COPY_538_1443
906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     February 15, 2005, 10:38:29; Search time 552.782 Seconds (without alignments) 9670.754 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   atggcccatgagatgattgg.....agaagattaagaaccagact 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      10757346
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

S	
S	
3	
5	
æ	
H	
ŝ	

11	10	9	8	7	6	5	.4	u	2	-	Regult No.
902.8	902.8	902.8	902.8	902.8	902.8	902.8	902.8	902.8	902.8	902.8	Score
99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6	Query Match
3544	3544	3544	3521	3496	3059	2732	2071	1998	1998	1998	Query Match Length
18	17	9	18	9	17	17	17	18	17	9	DB
US-10-377-072-25	US-10-377-072-25	US-09-816-494-1	US-10-370-715B-261	US-09-964-277-1	US-10-257-026-1	US-10-168-506-2	US-10-072-012-257	US-10-377-072-27	US-10-377-072-27	US-09-816-494-3	ID
Sequence 25, Appl	Sequence 25, Appl	Sequence 1, Appli	Sequence 261, App	Sequence 1, Appli	Sequence 1, Appli	Sequence 2, Appli	Sequence 257, App		Sequence 27, Appl	Sequence 3, Appli	Description

5 18 US-10-357-930-206 7 18 US-10-357-930-324
45 18 US-10-357-930-206
TO TO COLFCIONALONALTER
46 18 119-10-357-910-110
22 18 US-10-357-930-207
19 18 US-10-357-930-320
3 13 US-10-005-858-1
27 18 US-10-357-930-108
US-10-357-930-413
61 18 US-10-357-930-41
61 18 US-10-357-930-32
418 18 US-10-357-930-11
332 9 US-09-964-277-2
200 17 US-10-072-012-2
2966 17 US-10-296-115-5
.5 2102 17 US-10-094-749-6
.6 5145 18 US-1U-35/-93U-2
7 77 70 77 77 77 77 77 77 77 77 77 77 77
.6 5145 18 US-10-357-930-271
5145 18 US-10-357-930-271
6 5145 18 US-10-357-930-271
145 18 US-10-357-930-271
5 18 US-10-357-930-271
145 18 US-10-357-930-271
5 18 US-10-357-930-271
US-10-357-930-2
10-35/-930-2 10-094-749-6 10-296-115-5 10-072-012-2
S-10-094-749- S-10-296-115- S-10-072-012-
0-094-749-67 0-094-749-67 0-296-115-52 0-072-012-25 -964-277-20
35/-930-28 094-749-673 296-115-520 072-012-255 64-277-20 357-930-112 357-930-324
-930-28 -749-67 -115-52 -012-25 277-20 -930-11 -930-32 -930-41
30-41 30-41 30-41 30-41
1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
070 083 1 1 2 1 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3
44046 646

ALIGNMENTS

180	121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 180	Qy 121 CAC
120	AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 120	Db 61 AGT
120	AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 120	Qy 61 AGT
60	ATGGCCCATGAGATGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA 60	Db 1 ATG
60	ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGTGGTCTGCTGGAA 60	Qy 1 ATG
0;	vative 0; Mismatches 2; Indels 0; Gaps	Matches 904;
	99.6%; Score 902.8; DB 9; Length 1998;	Query Match
	omo sapiens	; ORGANISM: Homo sapiens US-09-816-494-3
		; LENGTH: 1998
		; SEQ ID NO 3
	NUMBER OF SEQ 10 NOS: 10	; NUMBER OF SECTIONS: IO
	PRIOR FILING DATE: 2000-03-24	; PRIOR FILING I
	PRIOR APPLICATION NUMBER: US 60/191,858	; PRIOR APPLICAT
	CURRENT FILING DATE: 2001-03-23	; CURRENT FILING
	CURRENT APPLICATION NUMBER: US/09/816,494	CURRENT APPLIC
	TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR	; TITLE OF INVENTION:
	38692 AND 21117, NOVEL	; TITLE OF INVEN
		; APPLICANT: Meyers, Rachel
	WATION:	; GENERAL INFORMATION:
	20020034807A1	; Patent No. US20020034807A1
	Sequence 3, Application US/09816494	; Sequence 3, App
		US-09-816-494-3
		RESULT 1

```
RESULT 2
US-10-377-072-27
US-10-377-072-27
Sequence 27, Application US/10377072
Publication No. US20040009501A1
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals Inc.
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
APPLICANT: Meyers, Rachel E.
APPLICANT: Williamson, Mark J.
APPLICANT: Williamson, Mark J.
APPLICANT: Rudolph-Owen, Laura A.
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGACT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCACCATCGCCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGTGGTTGGACAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGCAGAATGGGATTGGTTATAGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGGTGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTOTAGTOCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     crrecaegreges receivas de conserva de la conserva del la conserva de la conserva 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTGCAGGTGGGTTTGCTGAGTTCTCTCTCTTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                               MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                           δ
                                                                         밁
                                                                                                         Ś
                                                                                                                                                        밁
                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 / NAME/KEY: CDS
/ LOCATION: (1)...(1998)
US-10-377-072-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US 09/895,860
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR PLING DATE: 2001-06-29
PRIOR PLING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR PLING DATE: 2000-01-28
PRIOR PLING DATE: 2000-01-28
PRIOR FILING DATE: 2000-01-28
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR PILING DATE: 2000-04-25
PRIOR PILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Remaining Prior Application data removed
NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 27
LENGTH: 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: MPI03-0180MNIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                             481
                                                                         421
                                                                                                             421
                                                                                                                                                           361
                                                                                                                                                                                                                                               301
                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            904;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA
                                                                                             ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                             CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                    GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                    GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                             GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CACATITTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                  ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                        CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 902.8; DB 17
Pred. No. 3.4e-280;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ı
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1998,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
```

300

240 300

360

240

180

180

```
RESULT 3
US-10-377-072-27
; Sequence 27, App
; Publication No.
APPLICANT: CHUN, MAYOUNG
APPLICANT: Tea1, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPIG3-0180MNIM
CURRENT APPLICATION NUMBER: US/10/377,072
FRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 99/723,806
PRIOR PILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 99/723,806
PRIOR FILING DATE: 2000-11-28
PRIOR PILING DATE: 2000-01-28
PRIOR APPLICATION NUMBER: US 99/843,297
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR PILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 99/843,297
PRIOR APPLICATION NUMBER: US 99/861,801
PRIOR APPLICATION NUMBER: US 99/816,494
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Millennium Pharmaceuticals
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
APPLICANT: Glucksmann, Maria A.
APPLICANT: Meyers, Rachel E.
APPLICANT: Williamson, Mark J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCATCGCCTATCGCCTACATCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCGTGGTTGGACAAATCAGTAGAATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGCAGAATGGGATTAGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGCAGAATGGGATTGGTTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rudolph-Owen, Laura A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/10377072
lo. US20040157221A9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AND 49933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: DNA
; ORGANISM: Homo Sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)...(1998)
US-10-377-072-27
                                   ð
                                                                                밁
                                                                                                                   S
                                                                                                                                                        문
                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 904; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: FastSEQ
SEQ ID NO 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH:
         841
                                         841
                                                                                  781
                                                                                                                                                          721
                                                                                                                                                                                             721
                                                                                                                                                                                                                                   199
                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1998
                     ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                       CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCGTCGCTATCGCCTACATCATC
                                                                                                                                                                                                                                                      CCGTGGTTGGACAAATCAGTAGAATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                             ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                      CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                             CAGCAGAATGGGATTGGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTGCAGGTGGGTTTGCTGAAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                     CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTOTAGTOCOTACOTGCATTTOTCAGCOTTGCTTACOTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 902.8; 1
Pred. No. 3.4e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; DB 18;
3.4e-280;
2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
         900
                                         900
                                                                                  840
                                                                                                                       840
                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                            780
                                                                                                                                                                                             780
                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
```

S

901

CAGACT

```
APPLICANT: Lepley, Denise M.

APPLICANT: Rieger, Daniel K.

APPLICANT: Burgess, Catherine E.

ITILE OF INVENTION: Proteins and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-258

CURRENT APPLICATION NUMBER: US/10/072,012

CURRENT APPLICATION NUMBER: 60/265,102
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR PILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/265,517
                                                                                                                Remaining Prior Application data removed - See File Wrapper or NUMBER OF SEQ ID NOS: 1391
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 257
LENGTH: 2071
TYPE: DNA
ORGANISM: Homo sapiens
US-10-072-012-257
                            Ś
                                                                                                                                                                                                                              PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR PRILING DATE: 2001-02-02
PRIOR PRILING DATE: 2001-02-05
PRIOR PPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILING DATE: 2001-02-08
PRIOR PILING DATE: 2001-02-08
PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 4
US-10-072-012-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                  Query Match
Best Local Similarity
Matches 904; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 257, Applic
Publication No. US20
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Tchernev, Velizar
APPLICANT: Spytek, Kimberly
APPLICANT: Zerhusen, Bryan
    1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGACT 906
                                                     99.6%;
nilarity 99.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Padigaru, Muralidhara
Anderson, David W.
Rastelli, Luca
Miller, Charles E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gangolli, Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patturajan,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/10072012 o. US20040033493A1
                                                  Score 902.8; DB 17;
Pred. No. 3.4e-280;
0; Mismatches 2;
                                                     Indels
                                                                              Length
                                                  0,
                                                                                                                                                                                                                     PALM
                                                Gaps
                     60
                                                  0
Sequence 2, Application US/10168506
Publication No. US20040053229A1
GENERAL INFORMATION:
APPLICANT: PLOWMAN, GREGORY D.
APPLICANT: MARTINEZ, RICARDO
APPLICANT: WHYTE, DAVID
APPLICANT: WHYTE, DAVID
APPLICANT: MANNING, GERARD
APPLICANT: SUDARSANAM, SUCHA
                                                                                                                       RESULT 5
US-10-168-506-2
                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                     뭐
                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    믕
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                    196
                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                       CAGACT 906
                                                                                                                                                                                  CAGACT 966
```

```
121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                          ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGATTAAGAAC
                                                                                     CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCATCGCTATCGCCTACATCATG
                                                                                                                                                               CTAGTGCACTGTTTAGCTGGGAICTCCCGCTCCGCCACCATCGCCTATCGCCTATCATG
                                                                                                                                                                                                                                      CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAI
                                                                    ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                            ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                            CAGCAGAATGGGATTGGGTTATAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                 CAGCAGAATGGGATTGGTTATATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                  CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAACGAGGAGCTGATA
                                                                                                                                                                                                                 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
960
                                900
                                                                                                      840
                                                                    900
                                                                                                                                         840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                               780
                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                   720
                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
```

```
APPLICANT: HILL, RON
APPLICANT: FLANAGAN, PETER
TITLE OF INVENTION: MAMMALIAN PROTEIN PHOSPHATASES
FILE REFERENCE: 038602/1351
CURRENT APPLICATION NUMBER: US/10/168,506
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR FILING DATE: 2000-12-21
NUMBER OF SEQ ID NOS: 76
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 2
'LENCTH: 2732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; LENGTH: 2732
; TYPE: DNA
; ORGANISM: HOMO 8
US-10-168-506-2
                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                        8
                밁
                                          ঠ
                                                                  음 성
                                                                                                               문
                                                                                                                                        ક
                                                                                                                                                                     밁
                                                                                                                                                                                       ક
                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                      ક
                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 99.6%;
Best Local Similarity 99.8%;
Matches 904; Conservative
                                                                                                                         1138
                                                                                                                                                                        1078
                                                                                                                                                                                                                       1018
                                                                                                                                                                                               541
                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                      958
                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                       898
                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                        838
                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                        778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       658
                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ۳
                                                                       ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTTG
                                                                                                                                                                                       CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                      CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                     CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                    CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                     CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATCATC
                                                                                                                         ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                       CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                      GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                        CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATC
                                                                                                                                                                                                                                                                                                                                                                                                                       ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 902.8; DB 17;
Pred. No. 4.1e-280;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2732;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                 720
                                                                                                                                                                                               600
                                                                                                                                                                                                                       1077
                                                                                                                                                                                                                                                                                                                                                                                             360
                      1317
                                               780
                                                                        1257
                                                                                                                      1197
                                                                                                                                                                       1137
                                                                                                                                                                                                                                                                     1017
                                                                                                                                              660
                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                      957
                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                        897
                                                                                                                                                                                                                                                                                                                                                                                                                       837
                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               6
```

```
Sequence 1, Application US/10257026

Publication No. US20040086859A1

GENERAL INFORMATION:
APPLICANT: Merck Patent GmbH

TITLE OF INVENTION: New dual specificity phosphatase
FILE REFERENCE: DUSP10KDWS
CURRENT APPLICATION NUMBER: US/10/257,026

CURRENT FILING DATE: 2003-11-07

NUMBER OF SEQ ID NOS: 3

SOFTWARE: PatentIn Ver. 2.1
                δ
                                             밁
                                                               S
                                                                                     B
                                                                                                             5
                                                                                                                                            밁
                                                                                                                                                            S
                                                                                                                                                                                   밁
                                                                                                                                                                                                            S
                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                         닭
                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 1
LENGTH: 3059
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (127)..(2121)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-257-026-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 6
US-10-257-026-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 904; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 99.6%;
Best Local Similarity 99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1438
                     481
                                                                                             487
                                              547
                                                                     421
                                                                                                                  361
                                                                                                                                             427
                                                                                                                                                                    301
                                                                                                                                                                                          367
                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                          307
                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                         247
                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                          187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                                                                                                                                          127
                                                                                                                                                                                                                                                                                                                                         CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
          CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                        GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                           ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                           CTTGCAGGTGGGTTTGCTGAAGGAAAATCC
                                                                                                                                             GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                           GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                        GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                        CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGACT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 900
CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                             CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1443
                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 902.8; DB 17; Length 3059; Pred. No. 4.3e-280; O; Mismatches 2; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                          186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1437
                                                                      480
                                                                                             546
                                                                                                                                                                                            426
                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                          366
                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                          306
                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1377
                                              909
                                                                                                                                             486
                                                                                                                                                                                                                                                                                                                                          246
```

```
Sequence 1, Application US/09964277

Retent No. US2020137170A1

GENERAL INFORMATION:

APPLICANT: Luche, Ralf M.

APPLICANT: Luche, Ralf M.

APPLICANT: Wei, Bo

ITITE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHO

FILE REFERENCE: 200125, 434

CURRENT APPLICATION NUMBER: US/09/964,277

CURRENT APPLICATION NUMBER: US/09/964,277

NUMBER OF SEQ ID NOS: 22

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 1

LENGTH: 3496

TYPE: DNA

ORGANISM: Homo sapiens

US-09-964-277-1
     S
                           밁
                                                   Ś
                                                                             밁
                                                                                               S
                                                                                                                             밁
                                                                                                                                                   $
                                                                                                                                                                             밁
                                                                                                                                                                                                Ś
                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 7
US-09-964-277-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                              Matches 904;
                                                                                                                                                                                                                                                                                          Query Match
Best Local (
                              802
                                                                             742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1027
                                                    241
                                                                                                    181
                                                                                                                              682
                                                                                                                                                                             622
     301
                                                                                                                                                     121
                                                                                                                                                                                                                               562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                967
                                                                                                                                                                                        61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   667
                                                                                                                                                                                                                                                       Н
                                                                                                                                                                                                                                                                                          Similarity
                                                                                        GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                    GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                        CACATTITGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                       CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                        AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                            ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ĊŢĀĠŢĠĊĀĊŢĠŢŢŢĀĠĊŢĠĠĠĀŢĊŢĊĊĠĊŢĊĊĠĊĊĀĊĊĀŢĊĠŢĀŢĊĠĊĊŢĀĊĀŢĊĀŢĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCCTATCGCCTATCATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                             99.6%;
ilarity 99.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       906
                                                                                                                                                                                                                                                                         Score 902.8; DB 9;
Pred. No. 4.7e-280;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      PHOSPHATASE
                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                   3496;
                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                          Gaps
 360
                                                300
                                                                         801
                        861
                                                                                                240
                                                                                                                                                 180
                                                                                                                         741
                                                                                                                                                                        681
                                                                                                                                                                                                                          621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              726
                                                                                                                                                                                                                                                                          0
```

```
RESULT 8
US-10-370-715B-261
; Sequence 261, Application US/10370715B
; Publication No. US20040258678A1
; GENERAL INFORMATION:
; Patin Docket Preview
; Patin Docket Preview
                                                      APPLICANT: BODARY, SARAH C.

APPLICANT: CLARK, HILLARY
APPLICANT: BRISDELL, HUNTE
APPLICANT: SCHOENFELD, JILL R.
APPLICANT: SCHOENFELD, JILL R.
APPLICANT: WILLIAMS, P. MICKEY
APPLICANT: WOD, WILLIAMS, P. MICKEY
APPLICANT: WOD, WILLIAMS D.

TITLE OF INVENTION: Compositions and Methods for
TITLE OF INVENTION: Related Diseases
FILE REFERENCE: P1940R1-US
CURRENT APPLICATION NUMBER: US/10/370,715B
CURRENT FILING DATE: 2003-02-21
NUMBER OF SEQ ID NOS: 742
SEQ ID NO 261
LENGTH: 3521
TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     먉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
   Query Match
Best Local Similarity
Matches 904; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 1461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCATCGCTATCGCCTACATCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTAGTGCACTGTTTAGCTGGGATCTCCCCCCTCCGCCACCATCGCTATCGCCTACATCATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCGTGGTTGGACAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGCAGAATGGGATTGGTTATATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTGCCTATCCTGTTGCCAACATTGGGCCAACC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                99.6%;
Score 902.8; DB 18
Pred. No. 4.7e-280;
0; Mismatches 2;
                              DB 18;
                                                                                                                                                                                                        for the Treatment of Immune
                             Length 3521;
 0;
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              921
 0
```

```
RESULT 9

US-09-816-494-1
US-09-816-494-1
; Sequence 1, Application US/09816494
; Patent No. US20020034807A1
; GENERAL INFORMATION:
; APPLICANT: Meyers, Rachel A.
; TITLE OF INVENTION: 38692 AND 21117,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                           음성 음성 음
                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                유 원
                                                                                                                                                                                                                                                                                     8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유 성 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                           1464
                                                                                                                                                                                                                                                                                               1224
                                                                                                                                                                                                                                                                                                                                           1164
                                                                                                                                                                                                                                                                                                                                                                                                                                     1044
                                                                                                                                                                                                                                                                                                                                                                 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                   CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                           CAGACT 1469
                                                                                                                                                                                                                                                CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCATCGCTATCGCCTACATCATCA
                                                                                                                                                                                                                                                                                                                                          ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                     ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                    CAGCAGAATGGGATTGGGTTATAGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                 CAGACT 906
                                                                                                                                                                     ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                         CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                    CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACAAAGTGTTAAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                        ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
     NOVEL DUAL SPECIFICITY
                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                 1343
                                                                                                                                                                                                                                                                                                                                           1223
                                                                                                                                                                                                                                                                                                                                                                                        1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1043
                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TITLE OF INVENTION: PHOSPHATASE MOLECULES AN
; FILE REFERENCE: 10446-030002
; CURRENT APPLICATION NUMBER: US/09/816,494
; CURRENT FILING DATE: 2001-03-23
; PRIOR APPLICATION NUMBER: US 60/191,858
; PRIOR FILING DATE: 2000-03-24
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 3544
; TYPE: DNA
; ORGANISM: Homo sapiens
; PANTURE:
; NAME/KEY: CDS
; LOCATION: (589)...(2583)
US-09-816-494-1
                                 Ş
                                                       유 성
                                                                                                  문
                                                                                                                        Ş
                                                                                                                                                     문
                                                                                                                                                                      S
                                                                                                                                                                                            밁
                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                음 성
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                             중 유
                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 904; Conser
                                                                                                          1189
                                                                                                                                                      1129
                                                                                                                                                                                                    1069
                                                                                                                                                                                                                                                 1009
                                                              1249
                                                                                                                                601
                                                                                   661
                                                                                                                                                                             541
                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                              949
                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                           889
                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                         829
                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                     769
                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ш
                                                                                                                                                                                                                                                                                                                                          GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                            CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG 780
                                                             CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA
                                                                                                                                                                                                                                                                                             GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                      ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                        CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                      CAGCAGAATGGGGATTGGTTATATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                           ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                    GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99.6%;
llarity 99.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 902.8; DB 9;
Pred. No. 4.7e-280;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

1248 660 1188 540

1068

480 1008 360 888

240

180

420

```
APPLICANT: Willamson, Mark J.
APPLICANT: Chun, Miyoung
APPLICANT: Chun, Miyoung
APPLICANT: T861, Fong-Ying
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPI03-0180NMM
CURRENT APPLICATION NUMBER: US (10/377,072
PRIOR APPLICATION NUMBER: US (10/372,370)
PRIOR APPLICATION NUMBER: US (10/372,508)
PRIOR APPLICATION NUMBER: US (10/37
                                                                                                                                                                                                           ; SEQ ID NO 25
; LENCTH: 3544
; TYPE: DNA
; ORGANISM: Homo Sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (589)...(2586)
US-10-377-072-25
                                                                                                                           Query Match
Best Local Simi
Matches 904;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 10
US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 25, Application US/10377072
Publication No. US20040009501A1
                                                                                                                                                                                                                                                                                                                                                                               Remaining Prior Application data removed -
NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Millennium Pharmaceuticals
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
APPLICANT: Glucksmann, Maria A.
APPLICANT: Meyers, Rachel E.
APPLICANT: Williamson, Mark J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       781
                                                                                                                                                 Similarity
                                   arggcccargagargartggaactcaaattgtractgagaggtiggtggccccagaa
                                                       ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGACT 1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 906
                                                                                                                                               99.6%;
                                                                                                                        0;
                                                                                                                    Score 902.8; DB 17;
Pred. No. 4.7e-280;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                            See
                                                                                                                                                              DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                       File Wrapper or
                                                                                                                        Indels
                                                                                                                                                            Length
                                                                                                                    0;
                                                                                                                  Gaps
                                                                            60
                                   648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                    0
      ; Sequence 25, Application US/10377072; Publication No. US20040157221A9; GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals Inc.
APPLICANT: Curtis, Rory A.J.
APPLICANT: Curtis, Rory A.J.
APPLICANT: Glucksmann, Maria A.
APPLICANT: Meyers, Rachel E.
APPLICANT: Williamson, Mark J.
APPLICANT: Rudolph-Owen, Laura A.
                                                                                                                                                                                                                      RESULT 11
US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    망
                                                                                                                                                                                                                                                                                                                                                                                              1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
Curtis, Rory A.J.
Logan, Thomas Joseph
Glucksmann, Maria A.
Meyers, Rachel E.
Williamson, Mark J.
Rudolph-Owen, Laura A
                                                                                                                                                                                                                                                                                                                                                  CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                   ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                         CAGACT 1494
                                                                                                                                                                                                                                                                                                                                                                                          ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGCAGAATGGGATTGGTTAATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGCAGAATGGGATTGGTTATATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                    906
```

1488

900

1428

840

1368

780

1308

720

1248

660

1188

1128

600

1068

480

1008

420 948 888 300 828

밁 S

```
श्च
                                                                                                                              밁
                                                                                                                                                         ঠ
                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                          र्
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                            श्
                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (589)...(2586)
US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PILE REPRENCE: MPIG 3-0180MNIM
CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR PILLING DATE: 2000-01-28
PRIOR PILLING DATE: 2000-01-28
PRIOR PILLING DATE: 2000-03-07
PRIOR PILLING DATE: 2000-03-07
PRIOR PILLING DATE: 2001-04-25
PRIOR PILLING DATE: 2001-04-25
PRIOR PILLING DATE: 2001-04-26
PRIOR PILLING DATE: 2001-04-26
PRIOR PILLING DATE: 2001-04-26
PRIOR PILLING DATE: 2001-04-26
PRIOR PILLING DATE: 2001-05-21
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR PILLING DATE: 2001-05-19
PRIOR PILLING DATE: 2001-05-19
PRIOR PILLING DATE: 2001-05-19
PRIOR PILLING DATE: 2001-03-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Remaining Prior Application data removed -
NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 25
LENGTH: 3544
TYPE: DNA
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 99.6%;
Best Local Similarity 99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Chun, Miyoung
APPLICANT: T881, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 2000-05-19
APPLICATION NUMBER: US 09/816,494
FILING DATE: 2001-03-23
APPLICATION NUMBER: US 09/815,419
FILING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             589
421
                                         949
                                                                                  361
                                                                                                                                689
                                                                                                                                                                            301
                                                                                                                                                                                                                     829
                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                          769
                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                 709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  904; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA 60
                                                                                                                                                                                                                                                                                                                                                                                               CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                        CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                       GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                              GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                    CTTGCAGGTGGGTTTGCTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                          GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                     Score 902.8; DB 18
Pred. No. 4.7e-280;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             See File Wrapper or PALM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                              300
                                                                                  420
                                                                                                                                948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             648
480
                                       1008
                                                                                                                                                                         360
                                                                                                                                                                                                                   888
                                                                                                                                                                                                                                                                                                          828
                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                 768
                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                    맑
```

```
Ş
                                             망
                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                               US-10-425-114-26234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-425-114-26234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                 APPLICANT: Liu, Jingdong
APPLICANT: Chou, Yihua
APPLICANT: Kovalic, David K.
APPLICANT: Kovalic, David K.
APPLICANT: Screen, Steven B
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53313)B
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 26234
LENGTH: 3625
                                                                                                               Matches 904;
                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 26234, Application US/10425114
Publication No. US20040034888A1
                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                 OTHER INFORMATION: Clone ID: LIB4119-028-H6_FLI
                                                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1489 CAGACT 1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 120
                                                                                _
                                                                ATGGCCCATGAGATGATTGGAAACTCAAATTGTTACTGAGAGGGTTGGTGGCTCTGCTGGAA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGCAGAATGGGATTGGTTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGACT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                             99.6%;
ilarity 99.8%;
Conservative
                                                                                                               <u>,</u>
                                                                                                           Score 902.8; DB 1/;
Pred. No. 4.8e-280;
"Mismatches 2;
                                                                                                                                              DB 17;
                                                                                                               Indels
                                                                                                                                           Length 3625;
                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                              751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1128
```

```
RESULT 13
US-10-343-357-17
US-10-343-357-17
; Sequence 17, Application US/10343;
Publication No. US20040058341A1
; GENERAL INFORMATION:
APPLICANT: INCYTE GENOMICS, INC.;
APPLICANT: ELLIOTT, Vicki S.; RR;
APPLICANT: YAO, Monique G.; BURR;
APPLICANT: WANG, Yumei E.; STEWN;
APPLICANT: GANDHI, Ameena R.; AF
APPLICANT: LEE, Ernestine A.; HF
APPLICANT: LU, Dyung Aina M.; TH
APPLICANT: GRIFFIN, Jennifer A.;
APPLICANT: WUS, Henry; WARREN, E
APPLICANT: NOTYEN, Danniel B.;
APPLICANT: KEARNEY, Liam
                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                      뭥
                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                        1532
                                                                                                                                                                                                                                                                                                      1472
                                                                                                                                                                                                                                                                                                                                                 1412
                                                                                                                                                                                                                                                                                                                                                                                                                                           1292
                                                                                                                                                                                                                                                                                                                                                                                               1352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1052
                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
        : INCYTE GENOMICS, INC.; TANG, Y.Tom

ELLIOTT, Vicki S.; RAMKUMAR, Jayalaxmi
YAO, Monique G.; BURFORD, Neil

WANG, Yumei E.; STEWART, Elizabeth A.
GANDHI, Ameena R.; ARVIZU, Chandra S.
LEE, Ernestine A.; HAFALIA, April J.A.
LU, Dyung Aina M.; TRIBOULEY, Catherine M.
GRIFFIN, Jennifer A.; BAUGHN, Mariah R.
YUE, Henry; WARREN, Bridget A.

NGUYEN, Danniel B.; CHAWLA, Narinder K.
                                                                                                                                                                                                                         CAGACT
                                                                                                                                                                                                                                                     ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                   ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 900
                                                                                                                                                                                                                                                                                              CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCCTATCGCCTACATCATC
                                                                                                                                                                                                                                                                                                                                                          CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                        CCGTGGTTGGACAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGAATTCTTCCAATCTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACTGTTTTCTCACTGTACTTCTCCCGTAAACTGGAGAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                  Application US/10343357
                                                                                                                                                                                                        1597
                                                                                                                                                                                                                                 906
                                            3
                                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                                              1471
                                                                                                                                                                                                                                                                                                                                                                                          1411
                                                                                                                                                                                                                                                                                                                                                                                                                                      1351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                                                                                                                720
                                                                                                                                                                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            871
                           Ś
                                                                   Ş
                                                    밁
                                                                                               밁
                                                                                                                8
                                                                                                                                           밁
                                                                                                                                                               ş
                                                                                                                                                                                          밁
                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                          멂
                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
        1078
                                                    1018
                                                                         481
                                                                                                958
                                                                                                                                             898
                                                                                                                      421
                                                                                                                                                                   361
                                                                                                                                                                                                                301
                                                                                                                                                                                                                                        778
                                                                                                                                                                                                                                                             241
```

```
FILE REFERENCE: PI-0173 PCT
CURRENT APPLICATION NUMBER: US/10/343,357
CURRENT FILING DATE: 2003-01-28
PRIOR APPLICATION NUMBER: US/10/343,357
CURRENT FILING DATE: 2003-07-26
PRIOR APPLICATION NUMBER: US 60/221,679
PRIOR APPLICATION NUMBER: US 60/221,679
PRIOR FILING DATE: 2000-07-28
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR FILING DATE: 2000-08-10
PRIOR FILING DATE: 2000-08-16
PRIOR FILING DATE: 2000-08-16
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR FILING DATE: 2000-08-16
PRIOR APPLICATION NUMBER: US 60/229,254
PRIOR FILING DATE: 2000-08-30
PRIOR FILING DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-343-357-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PEATURE:
NAME/KEY: misc feature
OTHER INFORMATION: Incyte ID No. US20040058341A1 7480570CB1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              904; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Н
                                      CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                       CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAACGAGCTGATA
CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                              ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCC
                                                                                                                                                                                                                                                                                                                                                                                                  CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTGCAGGTGGGTTTGCTGAGGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCCCATGAGATGGTTGGAACTCAAATTGTTACTGAGAGGTTGGTGGTGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 902.8; DB 17
Pred. No. 4.9e-280;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
```

1137

480 1017 540 1077 420 957 837 360

657 180 717 240 777

```
RESULT 14
US-10-648-593-115
; Sequence 115, Application No. US200;
; Publication No. US200;
; CENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: BYTISCOL-Myers Squibb Company
APPLICANT: BYTISCOL-Myers Squibb Company
TITLE OF INVENTION: IDENTIFICATION OF GENES FOR PREDICTING ACTIVITY OF COMPOUNDS TH
TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR
TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS
PILE REFERENCE: D0273 NP
CURRENT APPLICATION NUMBER: US/10/648,593
CURRENT FILING DATE: 2003-08-26
PRIOR APPLICATION NUMBER: 60/406,385
PRIOR APPLICATION NUMBER: 60/406,385
PRIOR APPLICATION NUMBER: 60/406,385
PRIOR FILING DATE: 2002-08-27
NUMBER OF SEQ ID NUMBER: 557
SOFTWARE: PATENTIN VERSION 3.2
SEQ ID NO 115
LENGTH: 4790
TYPE: DNA
ORGANISM: Homo sapiens
                                                       밁
                                                                                     श
                                                                                                                         밁
                                                                                                                                                ঠ
                                                                                                                                                                                         밁
                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 99.6%;
Best Local Similarity 99.8%;
                                                                                                                                                                                                                                                                                                                                                                                             Matches 904; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1258
                                                                                                                                                                                           304
                                                                                          241
                                                                                                                           364
                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                             244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                          301
                                                           424
                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                             184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                              _
                                                                                                                                                                                         CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                              CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                              AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                           ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
   GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                           AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGACT 1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTAGTGCACTGTTTAGCTGGGGATCTCCCGGCTCCGCCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                         CAGACT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/10648593
                                                                                                                                                                                                                                                                                                                                                                                            Score 902.8; DB 18;
Pred. No. 5.6e-280;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                              DB 18;
                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                             Length 4790;
                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                           243
                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      900
                        360
                                                       483
                                                                                          300
                                                                                                                           423
                                                                                                                                                          240
                                                                                                                                                                                           363
                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                             303
                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   THAT
APPLICANT: Endege, Wilson
APPLICANT: Endege, Wilson
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
ITILE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
ITILE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THER
ITILE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCES: MRI-007ECN
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT APPLICATION NUMBER: 09/785,276
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-02-17
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-03-16
PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR FILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-12-13
NUMBER: 60/255,281
PRIOR FILING DATE: 2000-12-13
NUMBER: 60/255,281
PRIOR FILING DATE: 2000-12-13
NUMBER: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-357-930-20824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 20824, Application US/10357930 Publication No. US20040259086A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1084 CÁGÁCT 1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            484 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGACT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCACCATCGCTATCGCCTACCATCATCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTGCAGGTGGGTTTGCTGAAGTTCTCTCTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                             THERAPY OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            543
```

```
밁
                                                 8
                                                                  당
                                                                                   8 유
                                                                                                                     Ş
                                                                                                                                           밁
                                                                                                                                                        ঠ
                                                                                                                                                                         뭥
                                                                                                                                                                                           8
                                                                                                                                                                                                                 В
                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                               გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; NAME/KEY: misc_feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n = A,T,C
US-10-357-930-20824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQ ID NO 20824
LENGTH: 5145
TYPE: DNA
ORGANISM: Homo of FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 99.6%;
Best Local Similarity 99.8%;
Matches 904; Conservative
                                     1369
                                                                                                                                           1189
                                                                                                                                                                              1129
    1429
                                                                       1309
                                                                                                         1249
                                                                                                                                                                                                                 1069
                                                                                                                                                                                                                                                    1009
                    841
                                                                                                                                                             601
                                                     781
                                                                                        721
                                                                                                                           661
                                                                                                                                                                                               541
                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                      949
                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                        889
                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                           829
                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                              769
                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                            589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 900
                                            CTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                              CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG 780
                                                                                                                CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                    ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                             CAGCAGAATGGGATTGGTTATGTGTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                              CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                       CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                         ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                       CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT 600
                                                                                                                                                                                                                                                                                  CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                              CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                      GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 902.8; DB 18
Pred. No. 5.9e-280;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 18; Length 5145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
1488
                                                   840
                                                                     1368
                                                                                                                                                                             1188
                                                                                                      1308
                                                                                                                                         1248
                                                                                                                                                                                                               1128
                                                                                                                                                                                                                                                  1068
                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                    1008
                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                            828
                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                         720
                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                       948
                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                              768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
```

Search completed: February 15, 2005, 15:52:33 Job time: 553.782 secs

Gape

283

```
Sequence 1, Application US/09816494

Patent No. 6664089

PATENT INFORMATION:
APPLICANT: Meyers, Rachel A.
ITILE OF INVENTION: 98692 AND 21117, NOVEL DUAL SPECIFICITY
ITILE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR
PILE REFERENCE: 10448-030002

PILE REFERENCE: 10448-030002

PILE REFERENCE: 10478-030002

PILE REFERENCE: 10488-030002

PILE REFERENCE: 10488-030002

PILE REFERENCE: 10488-030002

PRIOR APPLICATION NUMBER: US/09/816,494

PRIOR PILING DATE: 2000-03-24

NUMBER OF SEQ ID NOS: 10

SOPTWARE: PASELSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Post-processing: Listing first 1000 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Toțal number of hits satisfying chosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gapop 60.0 , Gapext 60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Issued Patents NA:*

| (cgn2_6/ptodata/1/ina/5A_COMB.seq:*
| (cgn2_6/ptodata/1/ina/5B_COMB.seq:*
| (cgn2_6/ptodata/1/ina/6B_COMB.seq:*
| (cgn2_6/ptodata/1/ina/6B_COMB.seq:*
| (cgn2_6/ptodata/1/ina/bTCTUS_COMB.seq:*
| (cgn2_6/ptodata/1/ina/backfIles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gaaaagaagacgaggag.....ctgattccagaacacacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GenCore version 5.1.6 (c) 1993 - 2005 Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2005, 11:51:38; Search time 823 Seconds (without alignments)
10835.611 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             818138359
                                                                                                                                                                                                                                                                                                                                                                                                US-09-816-494-1
US-09-816-494-3
US-09-016-434-91
US-09-513-999C-2877
US-09-513-999C-3884
US-09-513-999C-24342
                                                                                                                                                                                                                                                                                                                                             ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Description
                                                                                                                                                                                                                                                                                                                                                                                                Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                e 1, Appli
e 3, Appli
e 91, Appl
e 2877, Ap
e 3684, Ap
e 24342, A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; LENGTH: 3544
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (589)...(2583)
US-09-816-494-1
                                                                     Ś
                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      음. 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                밁
                                                                                                                                         S
                                                                                                                                                                                      밁
                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 3299; Conserv
                                                                             1013
                                                                                                                    1004
       1073 TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG
                                                                                                                                                                                          944
                                                                                                                                                                                                                               893
                                                                                                                                                                                                                                                                   884
                                                                                                                                                                                                                                                                                                      833
                                                                                                                                                                                                                                                                                                                                             824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     224 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                                                                                                                                                                                                                                                                                                                                                                773
                                                                                                                                                                                                                                                                                                                                                                                                                       764
                                                                                                                                                                                                                                                                                                                                                                                                                                                        713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        173
                                                                                                                                                                                                                                                                  CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC
                                                                                                                                                                                                                                                                                                                                           GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGCTGGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                                            CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC 1072
                                                                                                                                                                                                                 ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCTGTTGTTTTCCCTGGCCTCTGTGAAGGAA
                                                                                                                                                                                                                                                                                           CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC
                                                                                                                                                                                                                                                                                                                                                               TTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCCAAGATGTTGCCTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                     AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                          AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                    AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC
                                                                                                                                     AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC
                                                                                                                                                                                            ACCTGCTTGCAGGTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           56.5%;
nilarity 99.9%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 3079; DE Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   踞
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 3544;
```

472

463

403

703 652

763 712 592

643

532 523

583

Result No.

Score

Query Match

Length DB

IJ

3079 1896 247 205 187 128

3544 1998 279 333 378 259

RESULT 1 US-09-816-494-1

1123

1063 1012 1003

952 943 892 883 832 823 Minimum Maximum

88

ве**q**

length: 0 length: 2000000000

Word size

1202784 ведв,

Sequence: Title: Perfect score:

US-10-029-345A-108 5450

February 15,

Copyright

Scoring table:

Database :

	•
1133 ACTITATICCCOMMITTICATITICATICCATIONAGE (183) 1134 ACTITATICCCOMMITTICATITICATICCATIONAGE (183) 1135 TITTICCCOMMITTICATICCATIONAGE (183) 1136 TITTICCCOMMITTICATICCATIONAGE (183) 1137 TITTICCCOMMITTICATICCATIONAGE (183) 1138 TITTICCCOMMITTICATICATIONAGE (183) 1139 TITTICCCOMMITTICATICATIONAGE (183) 1131 TITTICCCOMMITTICATICATIONAGE (183) 1132 TITTICCCOMMITTICATIONAGE (183) 1133 TITTICCCOMMITTICATIONAGE (183) 1134 TITTICCCOMMITTICATIONAGE (183) 1135 TITTICATIONAGE (183) 1136 TITTICATIONAGE (183) 1137 TITTICATIONAGE (183) 1138 TITTICATIONAGE (183) 1139 TITTICATIONAGE (183) 1131 TITTICATIONAGE (183) 1131 TITTICATIONAGE (183) 1132 TITTICATIONAGE (183) 1133 TITTICATIONAGE (183) 1134 TITTICATIONAGE (183) 1135 TITTICATIONAGE (183) 1137 TITTICATIONAGE (183) 1131 TITTICATIONAGE (183) 1131 TITTICATIONAGE (183) 1131 TITTICATIONAGE (183) 1132 TITTICATIONAGE (183) 1133 TITTICATIONAGE (183) 1134 TITTICATIONAGE (183) 1135 TITTICATIONAGE (183) 1137 TITTICATIONAGE (183) 1138 TITTICATIONAGE (183) 1139 TITTICATIONAGE (183) 1130 TITTICATIONAGE (183) 1131 TITTICATIONAGE (183) 1132 TITTICATIONAGE (183) 1133 TITTICATIONAGE (183) 1134 TITTICATIONAGE (183) 1135 TITTICATIONAGE (183) 1137 TITTICATIONAGE (183) 1138 TITTICATIONAGE (183) 1139 TITTICATIONAGE (183) 1130 TITTICATIONAGE (183) 1131 TITTICATIONAGE (183) 1131 TITTICATIONAGE (183) 1131 TITTICATIONAGE (183) 1131 TITTICATIONAGE (183) 1132 TITTICATIONAGE (183) 1133 TITTICATIONAGE (183) 1134 TITTICATIONAGE (183) 1135 TITTICATIONAGE (183) 1137 TITTICATIONAGE (183) 1139 TITTICATIONAGE (183) 1139 TITTICATIONAGE (183) 1139 TITTICATIONAGE (183) 1131 TITTICATIONAGE (183) 1131 TITTICATIONAGE (183) 1132 TITTICATIONAGE (183) 1133 TITTICATIONAGE (183) 1133 TITT	1124 TGATGCAGCAGAATTGGTATTTTTTTTTTTTTTTTTTTT
	_
8	ļ
2213 TROCOMORGIC CONTROCACTOR CONCRETACION CONTROCACION TERMINATION CONTROL TO THE CONTROL OF TH	

 5
 8
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8
 5
 8

QY 958 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 1017	Qy 898 CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGGTCTGTGAAGGAAAATCC 957	Qy 838 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 897	Qy 778 TGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	Qy 718 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT 777	QY 658 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 717	Qy 598 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 657	Qy 538 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA 597	Query Match 34.8%; Score 1896; DB 4; Length 1998; Best Local Similarity 99.9%; Pred. No. 0; Matches 1996; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	w s z	PRIOR FILING DATE: 2000-03-24 ; NUMBER OF SEQ ID NOS: 10 ; SOPTWARE: FABUSEQ for Windows Version 4.0 ; SEC ID NO 3	48-030002 NUMBER: US/09/816,494 : 2001-03-23 UMBER: US 60/191,858	ENERA APPLI TITLE	RESULT 2 US-09-816-494-3 ; Sequence 3, Application US/09816494 ; Patent No. 6664089	3523 AA		3403 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC	DD 3343 CTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC 3402 OV 3353 TGGCAACATCACGATTTAAGCTTAAGGTTGGGAGGGTTAACGAGTCTACCTTCTCTTTTGTA 3412	3293 CTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC
							· · · · · · · · · · · · · · · · · · ·			•								- 3/14 - 11
2038 TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTTCCTTTTCGGC 2097	78 AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTA	SATANGSANSONSCENSEATECH CONTRACTOR CANSACTOR CANSACT	THE CAME AND CAME TO TO CONTROL AND ACCORDANCE AND CONTROL AND CONTROL AND CAME TO	98 TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC 61 TCCTCATCAGAAGATGCTTTGGAATACTACTACTCCACTACTCTGGATGGGACCAAC 61 TCCTCATCAGAAGATGCTTTGGAATACTACTACTTCCACTACTCTGGATGGGACCAAC	38 ICICISSAIA CAMAICAGITICAIATICAGCCAGCAIGGCAGCAICCITACAIGSCTIC 01 TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC	78 AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCATAAGCTCAAGCGTTCCTTC		TIGHT CONTROL TO THE	98 GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACACCCCTCAGTCCACCC	1438 CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT 1497	1378 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 1437	1318 AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	1258 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG 1317	1198 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTT 1257	1138 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 1197	1078 CAGCAGAATGGGATTGTGTTATAATGCCAGCTATACCTGTCCAAAGCCTGACTTT 1137	481 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG 540	421 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 480 1018 ÇGAATTCTTÇÇCAATÇTTTATÇTTGGÇTGCÇAGÇGAGATĞTÇÇTÇAACAAGGAGÇTGATA 1077

```
RESULT 3
US-09-016-434-91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 91 Patent No.
             TELEPHONE: (650) 855-0555
TELEFAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 91
                                                         CLASSIFICATION:

PRIOR APPLICATION UMBER:

APPLICATION NUMBER:

FILING DATE:

CLASSIFICATION:

ATTORNEY/AGENT INFORMATION:

ATTORNEY/AGENT INFORMATION:

REGISTRATION NUMBER: 37,071

REFERENCE/DOCKET NUMBER: PA-0

TELECOMMUNICATION INFORMATION:

TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION
TITLE OF INVENTION: PATHWAY GENE EXPRESSION
NUMBER OF SEQUENCES: 1490
                                                                                                                                                                                                                               CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/016,434
FILING DATE: HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
                                                                                                                                                                                                                                                                                                                                                                                  COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    91, ...
No. 6500938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2278 GCCTACAGCTGCAGCTAGCCGACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2218 ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT 2277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2098
                                                                                                                                                                                                                                                                                                                                                                                                PALO ALTO : CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                    94304
CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCATTGAGGTCTCCTGA 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCATTGAGGTCTCCTGA 2535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 2517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCCTGACCAGCAGCTGGTATTTTGCC 2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTTCCACCAGCAGCACCTCACGAAGTCTGCCTGGCCTTGAGGGCTTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/09016434
                                                                                                                                                                                                                                                                                                                                                                                                                             3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                  USA
                                                                               PA-0002
                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OF SIGNALING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2157
```

```
APPLICANT: Dunas Milne Edwards, J.B.
APPLICANT: Dunas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Glordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
Patent No. 6783961
PILE REFERENCE: 59.US2.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR APPLICATION SEG ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 2877
LENGTH: 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 4
US-09-513-999C-2877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뭥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-016-434-91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 2877, Application US/09513999C Patent No. 6783961 GENERAL INFORMATION:
                                                                                                                                       ICCATION: 17
ICCATION: 17
OTHER INFORMATION: h=a o
PEATURE:
PEATURE:
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
NAME/KEY:
                               LOCATION: 19 OTHER INFORMATION: k=g FEATURE:
                                                               NAME/KEY: misc_feature LOCATION: 19
                                                                                                                                                                                                          FEATURE: misc_feature
                                                                                               OTHER INFORMATION: y=c
FEATURE:
                                                                                                                              LOCATION:
                                                                                                                                                                                                                                                     NAME/KEY: CDS
LOCATION: 127..333
                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                        TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRANDEDNESS: single TOPOLOGY: linear IMMEDIATE SOURCE: LIBRARY: LUNGFET03 CLONE: 1234795
                                                                                                                                                                                                                                                                                        FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
nes 247; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   754 GCGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          634 CCATTTGTGGAATACAATACATCCCACATTTTGGAAGCCATTAATATACAACTGCTCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        514 GGGAAAAGAGGACTTATTGTTGTCATGGCCCCATGAGATGATTGGAACTCAAATTGTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GGGAAAAGAGGACTTATTGTTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACT
misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTATGAAGCGAACGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGAGGTTGGTGGCTCTGCTGGAAAGTGGAAACGGAAAAAGTGCTGCTAATTGATAGCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGAGGTTGGTGGCTCTGCTGGAAAGTGGAAACGGAAAAAGTGCTGCTAATTGATAGCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCATTTGTGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.5%; Score 247; DB 4; L
100.0%; Pred. No. 7.2e-113;
                                                                                                               ဝူ
                                               õ
                                                                                                                                                                                   or
c
                                                 ct
                                                                                                                                                                                   or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
```

```
TITLE OF INVENTION: Expressed Sequence Tags and Enc. Patcent No. 6783961
PALCENT APPLICATION NUMBER: US/09/513,999C
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR FILING DATE: 199-02-26
NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patcent.pm
SEQ ID NO 3684
LENGTH: 378
LENGTH: 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 5
U8-09-513-999C-3684/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; OTHER INFORMATION: Xaa=His or Gln US-09-513-999C-2877
                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 3684, Application US/09513999C Patent No. 6783961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 3.8
Best Local Similarity 99.6
Matches 255; Conservative
 Query Match 3.4%; Score 187; DB 4; 1
Best Local Similarity 100.0%; Pred. No. 8.3e-83;
Matches 187; Conservative 0; Mismatches 0;
                                                                OTHER INFORMATION: k=g-09-513-999C-3684
                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Dumas Milne Edwards, J.B. APPLICANT: Duclert, A. APPLICANT: Giordano, J.Y.
                                                                                                                                             ORGANISM: Homo sapiens FEATURE: NAME/KEY: CDS LOCATION: 216..377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: UNSURE LOCATION: 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc_feature
LOCATION: 237
OTHER INFORMATION: w=a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc_feature
LOCATION: 58
OTHER INFORMATION: r=a
                                                                                              FEATURE:
NAME/KEY: misc_feature
LOCATION: 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         648 CAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             78
                                                                                                                                                                                                                                                                                                                                                                                               Dumas ...
Duclert, A.
--dano, J.Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTTCACCTGCTTGCA 903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAWAGCTCCCAAGATGTTGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTTCACCTGCTTGCA 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTCTCTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                      Giordano,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       W=a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    n=a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3.8%;
                                                                               or
t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 205; DB 4
Pred. No. 8e-92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 4;
                                 DB 4; Length 378;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1;
                                                                                                                                                                                                                                                                                                                                                                                       Encoded Human Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 333;
   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         707
 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
```

```
FILE REPERENCE: 59.US2.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
FRIOR APPLICATION UNBER: US 60/122,487
PRIOR FILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
SOFTWARE: PATENT. pm
SEQ ID NO 24342
LENGTH: 259
                                                                                           S
                                                                                                                              밁
                                                                                                                                                           Ś
                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
Search completed: February 15,
Job time : 824 secs
                                                                 밁
                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                   ; OTHER INFORMATION: n=a, g, c US-09-513-999C-24342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-513-999C-24342; Sequence 24342, Application US/09513999C; Patent No. 6783961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Giordano, J.Y.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
Patent No. 6783961
                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 128; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc_feature LOCATION: 230
                                                                                                5098
                                                                                                                                                        4978 GTGTAAAGTTAGATGGAAAGACTGTAAATGTTTAATAATGAATATAGTGTTCTTTTGAAGT
                                                                                                                               162
                                                                                                                                                                                                 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             378
                                                                 222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGTGGCTCTGCTGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTG
                                                                                                                                                                                                 GTGTAAAGTTAGATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTTTGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAAC
                                                                 ATGTATGA
                                                                                               ATGTATGA 5105
                                                                                                                                 AAGGCCAGCTGTTGAACGGTTAAACTGTGCATTTCTCATTTTGATGTGTCATGTTATGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATAAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATAAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGTGGCTCTGCTGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTG
                                                                                                                                                                                                                                                               2.3%; Score 128; DB 4; Length 259; larity 100.0%; Pred. No. 2.9e-53; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         767
                                                                 . 229
               2005,
                                                                                                                                                                                                                                                                                                                                                    ဗူ
               21:20:50
                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                 Сарв
                                                                                                                                                                  5097
                                                                                                                                                                                                   161
                                                                                                                                                                                                                                  5037
                                                                                                                                   221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              640
                                                                                                                                                                                                                                                                 0
```

This Page Blank (uspto)

```
Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                             Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Listing first 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Total number of hits satisfying chosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Word size
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Searched:
                                                                                                                                                                                                                                                                                                                                         Pred. No. is the nuscore greater than and is derived by \varepsilon
                                                                                                                                                                                                                                             Score
        44413
44413
44413
44413
44413
44413
44413
14413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                             Published Applications NA:*

1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*

2: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*

3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*

4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*

5: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*

6: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*

7: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*

8: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*

9: /cgn2_6/ptodata/1/pubpna/US09E_PUBCOMB.seq:*

10: /cgn2_6/ptodata/1/pubpna/US09E_PUBCOMB.seq:*

11: /cgn2_6/ptodata/1/pubpna/US09E_PUBCOMB.seq:*

13: /cgn2_6/ptodata/1/pubpna/US09E_PUBCOMB.seq:*

14: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*

15: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*

16: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*

17: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*

18: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*

19: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*

19: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*

20: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*

20: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*

21: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*

22: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*

23: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*

24: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*

25: /cgn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*
                                                                                                                                                                                                                                           Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OLIGO_NUC
Gapop 60.0 , Gapext 60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-029-345A-108
5450
1 gaaaagaagacgaggaggag.....ctgattccagaacacacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            February 15, 2005, 15:22:58; Search time 2769 Seconds (without alignments) 11613.401 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5378673 seqs, 2950229984 residues
        81.0
81.0
81.0
81.0
81.0
81.0
81.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Copyright
                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                         number of results predicted by chance to have a an or equal to the score of the result being printed, y analysis of the total score distribution.
        GenCore version 5.1.6 (c) 1993 - 2005 Compugen
    US-10-357-930-20824

US-10-357-930-21071

US-10-357-930-211071

US-10-57-930-21103

US-10-357-930-21303

US-10-357-930-22820

US-10-357-930-26669

US-10-357-930-26812

US-10-357-930-26912
                                                                                                                                                                                                                                             H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          summaries
                                                                                                                                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        parameters:
                                                                                                                                                                                                                                           Description
                      Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
        Sequence
      20824,
20969,
21071,
21083,
21303,
21307,
22820,
26669,
26669,
26815,
26912,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            a a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0000
        81.0

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

78.2

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              111.0
9.9
9.9
9.9
9.9
7.6
7.6
7.6
    \begin{smallmatrix} 555 \\ 555 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 556 \\ 55
                                                                                                                                                                                                                                                                                                                       B. US-10-357-930-27145
B. US-10-357-930-27145
B. US-10-357-930-27145
B. US-10-357-930-27145
B. US-10-357-930-27145
B. US-10-357-930-2717
C. US-10-377-072-25
B. US-10-377-072-25
B. US-10-377-072-25
B. US-10-377-072-25
C. US-10-168-266-2
C. US-10-175-026-115-520
C. US-10-168-266-2
C. US-10-175-026-115-520
C. US-10-175-026-2
C. US-10-175-027-027-27
C. US-10-175-027-032-144266
C. US-10-175-030-144266
C. US-10-175-0
Sequence 27145, A
Sequence 27145, A
Sequence 28675, Ap
Sequence 28675, App
Sequence 17, Appli
Sequence 1, Appli
Sequence 25, Appli
Sequence 261, Appli
Sequence 261, Appli
Sequence 27, Appli
Sequence 20, Appli
Sequence 27, Appli
Sequence 24920, A
Sequence 24920, A
Sequence 24920, A
Sequence 24920, A
Sequence 1772, Appli
Sequence 1773, Appli
Sequence 1773, Appli
Sequence 1774, Appli
Sequence 1775, Appli
Sequence 1774, Appli
Sequence 1775, Appli
Sequence 1776, Appli
Sequence 1776, Appli
Sequence 1777, Appli
Sequence 1779, Appli
Sequence 1770, Appli
Sequence 1770,
```

```
NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FASTSEQ for Windows
SEQ ID NO 20824
LENGTH: 5145
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
LOCATION: 1, 5144, 5145
OTHER INFORMATION: n = A,T,C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR FILING DATE: 2003-02-16
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/189,862
PRIOR FILING DATE: 2000-03-16
PRIOR FILING DATE: 2000-03-16
PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR FILING DATE: 2000-05-05
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR PILLING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR PILLING DATE: 2000-12-13
NUMMBER OF SEOT TO NOS. 62020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 1
US-10-357-930-20824
                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local S
Matches 4683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 20824, Application US/10357930 Publication No. US20040259086A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Schlegel. Robert
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND
FILE REFERENCE: MRI-007BCN
                                                            473
                                                                                                                                                                                                                                                                                                                                                                                       4683;
                                                                                        464
                                                                                                                                                                              353
                                                                                                                      413
                                                                                                                                                    404
                                                                                                                                                                                                            344
                                                                                                                                                                                                                                         293
                                                                                                                                                                                                                                                                     284
                                                                                                                                                                                                                                                                                                 233
                                                                                                                                                                                                                                                                                                                               224
                                                                                                                                                                                                                                                                                                                                                           173
                                          ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGAGACTTATTG
                                                                                 AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                            GAGAAAGĀGĀČĀTTCĀĊTTĠGĀĠĠĠĊTĊTTĠĊŢĠĀĀĀĀŢĠĠĠŢŢŢĀĀĊŢĊŢĊŢŢŢŢĠĊĊ
                                                                                                                                                             GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                       ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAAGAGGACTTATTG
                                                                                                   AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTTGAGCCTTTTGAGC
                                                                                                                                                                                                    ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                      ĠĊŦŦŦĊĀĠŦĊĊĀĠŦĠŦĀĀĀĠĊŦĠŦŦĠĠĀĠĊĠĊĠĠĠĠĠĊĀĀĀĠĠŦĀĀĀĠĀĀŦĠĀŦĠŦĀĀŦĠ
                                                                                                                                                                                                                          ATCAAATGTGAGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                          ĊĠĊŢĠĠĊŢĠĊŢĊĊAĀĀĠĊĀŢĊŢŢŢŢĠŢŢĠĠĀĀŢĠĠŢŢĀŢŢĊĊĀĠŢĊĀŢĊŢŢŢĀŢĠĀ
                                                                                                                                                                                                                                                                             CGCTGGCTGCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                       GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG 232
                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                   81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             A,T,C or
                                                                                                                                                                                                                                                                                                                                                                                  Score 4413; DB 18;
Pred. No. 0;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.0
                                                                                                                                                                                                                                                                                                                                                                                 ω
•
                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                             5145;
                                                                                                                                                                                                                                                                                                                                                                                 1;
                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FOR
THERAPY
                        583
                                                    532
                                                                                 523
                                                                                                              472
                                                                                                                                            463
                                                                                                                                                                        412
                                                                                                                                                                                                     403
                                                                                                                                                                                                                                 352
                                                                                                                                                                                                                                                               343
                                                                                                                                                                                                                                                                                           292
                                                                                                                                                                                                                                                                                                                      283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ဝှု
                                   뮍
                                                              Ś
                                                                                                                      Ś
                                                                                           B
                                                                                                                                                       밁
                                                                                                                                                                              S
                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                             1544
                                                                                                                                                                                   1433
                                                                                                                                                                                                                1424
                                                                                                                                                                                                                                                                        1364
                                                                                                                                                                                                                                                                                                    1313
                                                                                                                                                                                                                                                                                                                                    1304
                                                                                                                                                                                                                                                                                                                                                                                                                         1193
                                                                                                                                                                                                                                                                                                                                                                 1253
                                                                                                                                                                                                                                                                                                                                                                                            1244
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                533
GCGTGCCCAGCGTGCCAGCGTGCAGCCGTTGGTTAGAGGACAGCCCGCTGGTACAGG
                                                CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGAGGACAAAGGCCCGTGCATCCCGCCA
                                                                                                           CAAATGAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTC
                                                                                                                                                                                                                          CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA 1432
                                                                                       CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAAGCGAGACGCCCCTCAGTC
                                                                                                                                                  AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGC
                                                                                                                                                                           AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGC 1492
                                                                                                                                                                                                        GIGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA
                                                                                                                                                                                                                                                                                                                                              GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA 1312
                                                                                                                                                                                                                                                                                     TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAACCCGAATTCTTCCCAATCTTTATCTTGCCTGCCAGCGAGATGTCCTCAACAAGGAGC 1072
                                                                                                                                                                                                                                                                                                                                                                                                     TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGAT 1252
                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTTGTGAGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTITATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTTGTGAGAAA 1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGATGCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGATACAGCAGAATGGGATTGGTTATATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAACCCGAATTTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGGCCTCTGTGAAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AACAGGACAAAGTGTTAATTTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA 652
 1672
                                                           1612
                                                                                                                    1552
                                                                                                                                                                                                                                                                    1423
                               1663
                                                                                        1603
                                                                                                                                                  1543
                                                                                                                                                                                                            1483
                                                                                                                                                                                                                                                                                                                             1363
                                                                                                                                                                                                                                                                                                                                                                                     1303
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                643
```

밁

DЬ \$ 밁 Ş 밁 Ś 망 S 닭

S

Ś	B 8	용 성	8 &	B &	B 성	B &	용 성	용 성	<u> </u>	B 8	B 8	B 8	ß 8	B 8	B &	8 8	gg dy	Db D
2693 CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCA 2752	2633 TATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT 2692	2573 TTTTCTTGTTCACAAAAAAATCCCCTGTAAATCTGAAATATATAT	2513 TGGAAATCATTGAGGTCTCCTGAGAAGAAGAACACTTGTGACCTCTATAGACAATTTTTT 2572	2453 AGAACAGGTCACGGGAAGAGCTGGGGAAAAGTGGGCAGTCAGT	2393 TTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAG 2452	2333 GGCGGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGAG	2273 ACTCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA 2332	2213 TTGCCACAGAGTCCTCACACTTCTACTCTCTCCGGCCATCTACGGAGGCAGTGCCAGTT 2272	2153 GGCACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATT 2212	2093 TCGGCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCT 2152	2033 TTTTATCTCCACTGCATCGAAGTGGGAAGTGGAGGACAATTACCACACCAGCTTCCTTT 2092	1973 GCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGGACCGCCCAGAGGTCCC 2032	1913 GTCCTGATAAGGAGGAAGCCAGGATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA 1972	1853 CCAACAAGCTATGCCAGTTCTCCCCCTGTTCAGGAACTATCGGAGCAGACTCCCCGAAACCA 1912	1793 GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA 1852 	1733 CCTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGC	1673 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT 1732 	
														•				
B &	B &	}	§ § §	<u> </u>	B &	8 B 8	Ŗ 	B &	}	S & &	dg dg	B &	8 8 8	S & &	} B &	S B 2	\$ \$ \$	da
3773 GAGAGGCTTTAGTGAGGAAGGAATATTCAGAATAAAACGGTTGAGAAAGCTGAGAAGA 3832 	CATGCGATGGGGCTGATGTTTCTATGATTGCCTCAGACTTTCACATTTACTAGTAGGGCT			CARAGCAGATGTTTTTGCCCCTTTCTGCTTCACTGCATGGATACAGTTGGTAAAAATGTAAT	ANGCCANATUTGAATTTATTTUGGTTGGTAGCAGCAGCACCAGCACCTTCAAATTCTCAGC	AATCAAAGAAATTGTTTAAAATGGGATTGTCAATCCTTTTAATAAAGATGAACTTTGGTTTC	TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC	CTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC	CCAATICAAKTICITAIGCKCAAAATICCCGIGGCCTAGAIGAGAAAAAATITITITIT	ATCTGGTAGCCCATTTCTAGGCATTGTGAATAGGTAGGTA	TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAGTCGGGGCTTTGACCACTACCAT	TGACAGCCGAGGGACACGAGCATCACTCTGCTGGACGGAC	TAG TAG	TAGCGCTAAGAC TGAGCCAGCTAGGGGGTCAGGTAGGTAGACCCTGTTAGGGACAGAGCC TAGCGCTGAGACCTGAGCCAGCTTGGGGGGTCAGGTAGGT	# TO CONTROL OF THE C		2753 GATGCTAGAATCCCCCCTAGACGAGGAAAAACCATTTTATTCAGTGAATTACACATCCTC 2812 2753 GATGCTAGAATCCCCCCTAGACGAGGAAAACCATTTTATTCAGTGAATTACACATCCTC 2812 2803 GATGCTAGAATCCCCCCTAGACGGAGGAAAACCCATTTTATTCAGTGAATTACACATCCTC 2862 2803 GATGCTTCTTAGAAAAAACCCTTTTTGGTTGGAGGACAAAATCCCTCTACCCATTTTCAC 2872	CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCA

청 유

중 유

뮍

```
4673
                                                                                                                                                       4663
                                                                                                                                                                            4613
                                                                                                                                                                                                  4603
                                                                                                                                                                                                                       4553
                                                                                                                                                                                                                                             4543
                                                                                                                                                                                                                                                                  4493
                                                                                                                                                                                                                                                                                        4483
                                                                                                                                                                                                                                                                                                             4433
                                                                                                                                                                                                                                                                                                                                  4423
                                                                                                                                                                                                                                                                                                                                                       4373
                                                                                                                                                                                                                                                                                                                                                                              4363
                                                                                                                                                                                                                                                                                                                                                                                                                        4303
                                                                                                                                                                                                                                                                                                                                                                                                                                              4253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3833
recciec
                      GCGAAGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCT
                               GCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAGGTGGGGTGG
                                                            AGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTG
                                                                                                       TAGGGCTTCTCTGGCCATGGTCCCCTTCCTTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                     TAGGGCTTCTTGGCCATGGTCCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                              CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT
                                                                                                                                                  TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                 TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                                                       GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                           GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                  ACTICAIGITICCTAIGGIGACIICTAAAACCAGCACAGAAIGATAIGACTCAACACAGA 4312
                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGGGGCTGGGCGGGTGTTGTCATTGTTCTTTCCCTTCTGTAAGTGTCGCTAGTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGTCCTCAGTCCTCAACCTACAATCACTGTATGGAATCGGTCCTGGCAGCTGAACATAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATCAGCTACAGTGTGGGTCCTCTTTTGAAGCCTTAATTCACAACAGCAGCTTTTTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATCAGCTACAATGTGGGTCCTCTTTTGAAGCCTTAATTCACAACAGCAGCTTTTTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCATTGAGTTTTGATCAGTTGTGAATAGAGTGCAAAGCCATGGCCAAGCTGTTTTTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACGCTGGCCGGCGTGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGAGCAAAGGGG
4859
                  TGGATGTCTTTAGGTGGGGTGG
                  4902
                                       4852
                                                                                                                             4732
                                                                                                                                                  4722
                                                                                                                                                                                                                   4612
                                                             4842
                                                                                   4792
                                                                                                       4782
                                                                                                                                                                         4672
                                                                                                                                                                                               4662
                                                                                                                                                                                                                                         4602
                                                                                                                                                                                                                                                                                    4542
                                                                                                                                                                                                                                                                                                        4492
                                                                                                                                                                                                                                                                                                                             4482
                                                                                                                                                                                                                                                                                                                                                   4432
                                                                                                                                                                                                                                                                                                                                                                         4422
                                                                                                                                                                                                                                                                                                                                                                                              4372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4252
                                                                                                                                                                                                                                                                                                                                                                                                                                                               4302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4002
          В
                                 Ś
                                                         밁
                                                                           5
                                                                                                  В
                                                                                                                       8
                                                                                                                                                밁
                                                                                                                                                                  δ
                                                                                                                                                                                             밁
                                                                                                                                                                                                              S
                                                                                                                                                                                                                                      뮍
                                                                                                                                                                                                                                                        ঠ
```

맑 S 밁 δ 5 Ś В Ś Ъ S 밁 ક Д Ş 밁 Ś 밁 Ş 맑 S 밁 8 밁 S 밁 S 밁 8 망 Ś

```
US-10-357-930-20969

US-10-357-930-20969

Sequence 20969, Application US/10357930

Publication No. US20040259086A1

GENERAL INFORMATION:

APPLICANT: Endege, Wilson

APPLICANT: Endege, Wilson

APPLICANT: Monahan, John

TITLE OF INVENTION: LOENTIFICATION, KITS, AND METHODS FOR

TITLE OF INVENTION: LOENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF

TITLE OF INVENTION: HUMAN PROSTATE CANCER

CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT FILING DATE: 2003-02-04

PRIOR RPLICATION NUMBER: 09/785,276

PRIOR PPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR PILING DATE: 2000-02-17

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR PILING DATE: 2000-03-16

PRIOR APPLICATION NUMBER: 60/213,314

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR FILING DATE: 2000-03-16

PRIOR PILING DATE: 2000-03-16

PRIOR PILING DATE: 2000-07-18

PRIOR PILING DATE: 2000-07-18

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281
                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; FEATURE:

; NAME/KEY: misc feature

; LOCATION: 1, 5144, 5145

; OTHER INFORMATION: n = A,T,C

US-10-357-930-20969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 4683; Conserv
        584
                                                         533
                                                                                                               524
                                                                                                                                                                  473
                                                                                                                                                                                                                     464
                                                                                                                                                                                                                                                                            413
                                                                                                                                                                                                                                                                                                                                  404
                                                                                                                                                                                                                                                                                                                                                                                     353
                                                                                                                                                                                                                                                                                                                                                                                                                                           344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGTGGTCTGC 592
                                                                                                         ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                   AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                     AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTTGAGC
                                                                                                                                                                                                                                                                                                                         GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                         GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGCTGGCTGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGCTGGCTGCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 4413; DB Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           မ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ω
•
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 5145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                            532
                                                                                                         583
                                                                                                                                                                                                                                                                      472
                                                                                                                                                                                                                                                                                                                            463
                                                                                                                                                                                                                                                                                                                                                                                  412
                                                                                                                                                                                                                                                                                                                                                                                                                                      403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ဝူ
```

& & &	B &	B &	B &	음 성	<u> </u>	<u> </u>	B &	g Q	D 49	g Qy	B 8	B 8	g Q	B 8	\$ &	g Qy	β δ
1613 GCGTGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCCGGTACAGG	553	1493 CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGACGCCCCTCAGTC	1433 AGAACCAGACTGGAGCATCAGGGCCAAAGAGACTCAAGCTGCTGCACCTGGAGAAG	73 0	1313 TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCCACCACCATCGCTATCGCCTACA	1193 TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGAT	1133 ACTITATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA	1073 TGATACAGCAGAATGGGATTGGTTATGTGTAAATGCCAG	1013 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAA	953 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTAACCTGTTGCCAA	893 ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCGGTTGTTTCCCTGGCCTCT	833 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTT	773 TIGATIGCAGICAGAAGGIIGIAGIITACGAICAAAGCICCCAAGAIGIIGIIG	713 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTC	653 CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTG	593 TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
AGGACAGCCCGCTGGTACAGG 1672		NANGCGAGACGCCCCTCAGTC 1552	AGCTGCTGCACCTGGAGAAGC 1492	TGGACTATGAGAAGAAGATTA 1432	GATTTGTGAAAGAAAAAAGAC 1372 	CCACCATCGCTATCGCCTACA 1312	AAGCAAAAGCCTCCAATGGAT 1252	ATGACAGCTTTTGTGAGAAAA 1192	CCAGCTATACCTGTCCAAAGCCTG 1132	GAGATGTCCTCAACAAGGAGC 1072	TACCTGTTGCCAACATTGGGC 1012	TCCCTGGCCTCTGTGAAGGAA 952	AGAAGAGCTTCAACTCTGTTC 892	CCCAAGATGTTGCCTCTCTCT 832	CATCCAGCATTCAGCGAAACATAAGGTTGACA 772	AGCTTATGAAGCGAAGGTTGC 712	GGCCATTTGTGGAATACAATA 652
\$ B \$	B &	Qγ db	dg Qy	B &	Db Qq	B &	B &	B &	용 · 원	\$ \$ \$	B 8	Db Qq	, B &) B &	S & S	B &	} B
2693 CTCTTAACATCTGCATTTGAAGAGTATAGCTAATACTTCTCTCAACAAAATTGGAAGGGCA 2693 CTCTTAACATCTGCATTTGAAGAGTATACTTCTCTCTCAACAAAATTGGAAGGGCA 2793 CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCTAACAAAAATGGAAGGGCA 2793 GATGCTAGAATCCCCCCTAGACGGAGGAAAACCCATTTTATTCAGTGAATTACCATCCTC [2633 TATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT	2573 TITTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT					2273 ACTOTGCCTACAGCTGCAGCCAGCTGCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA 	2213 TIGCCACAGAGICCTICACACTICITACTICTGCCTICAGCCATCTACGGAGGCAGTGCCAGTGCCAGTGCCAGTGCCAGTGCCAGTGCCAGTGCCAGTGCCAGTGAGTG		2093 TCGGCCTTTCCACCAGCAGCAGCACCTCACGAACTCTGCTCGCCTGGGCCTTAAGGGCT 2144 TCGGCCTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCT 2146 TCGGCCTTTCCACCAGCAGCAACCTCACGAAGTCTGCTGGCCTTGAGCGCTTAAGGGCT 2150 TCGGCTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTTGGGCCTTAAGGGCT		1973 GCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGTGGCACCGCCCAGAGGTICCC 				1/33 CCTTCTCTCTGGATATCAMATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATG	

3833 CCATTGAGTTTTGATCAGTTGTGAATAGAGTGCAAAGCCATGGCCAAGCTGTTTTTGGAA 3892 	3713 CATGOGATGGGGCTGATGTTTCTATGATTGCCTCAGACTTTCACATTTACTAGTAGGGCT 3772	3643 ARTATIGICAGAATTITATAGGAAACTTCCTAGGGAGGTAAATTÄTGGGÄÄGÄTÄÄÄÄÄÄÄÄÄÄ	533 CAAAGCAGATGTTTTTGCCCCTTTCTGCTTCACTGCATGGATACAGTTGGTAAAATGTAAT	3463 AATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAÄÄİAAĞATĞAÄCTİĞĞİTİĞ 3522 3473 AAGCCAAATGTGAATTTATTTGGGTTGGTAGCAGAGCAG	3413 AATCAAAGAATTGATTAAAATGGGATTGCTAATTAAATAAA		3233 CCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGATAATTTTTTTT	323 328		42-42	ω ω	30		2803 GATIGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTC 2862 2813 TIGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTTGGAGGACAAAATCCCCTACCATTTTCAC 2872
RESULT 3 US-10-357-930-21071 ; Sequence 21071, Application US/10357930	Oy 4793 GCGAAGGGTGGCCTCGGAAGGCAGGCTCTTGGAGCTGCTTTAGGTGGGGTGG 4852	4733 AGCCT	Qy 4613 TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATT 4672	4553 GTTCA 4603 GTTCA	4483 AAAGTGCTGGTCAACGATTTGAGTTTTTAGATATTACACACAC	QY 4373 GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG 4432	4313 CCGA(4363 CCGA(QY 4253 ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCAGAATGATATGACTCAACAGAGA 4312	Qy 4193 CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG 4252	QY 4133 GTGGGGCTGGGCGGGTGTTGTCATTGTTCCCTTCCTGTAAGTGTCGCTAGTTGCTG 4192	Qy 4073 TATCAGCTACAATGTGGGTCCTCTTTTGAAGCCTTAATTCACAACAGCAGCTTTTTGGGG 4132	Qy 4013 AGGTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTT 4072	Qy 3953 CGTCCTCAGTCCTCAACCTACAATCACTGTATGGAATCGGTCCTGGCAGCTGAACATAGG 4012	Qy 3893 ACGCTGGCCGGCGTGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGAGCAAAGGGG 3952

성 유

밁

дЬ

중 유

음 성

593 TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA 65 	Qy 473 ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAAGAAGACTTATTG 532	Qy 413 AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC 472	353 GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC 4	293 ATCADATETGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGADA 3	233 CGCTGGCTGCTCCAAAGCATCTTTTGTTGTATGAATGGTTATTCCAGTCATCTCTTTATGA	173 GCTTTCAGTGTAAAGCTGTTGAAGCGGGGGGGGAGCAAAGGTAAAGAATGATGTAATG 23	Query M Best Lo	; NAME/KEY: misc_feature ; LOCATION: 1, 5144, 5145 ; OTHER INFORMATION: n = A,T,C or G US-10-357-930-21071	5	PRIOR FILING DATE: 2000-12-13 PRIOR FILING DATE: 2000-12-13 NUMBER OF SEQ ID NOS: 62232 SOFTWARE: FASTSEQ for Windows Ver	PRIO	PRIOR PILLING DATE: 2000-03-16 PRIOR APPLICATION NUMBER: 60/207, PRIOR PILING DATE: 2000-05-25 PRIOR PILING DATE: 2000-05-25	PRIOR FILING DATE: 2003-02-16 PRIOR APPLICATION NUMBER: 60/183,319 PRIOR APPLICATION NUMBER: 60/183,319 PRIOR APPLICATION NUMBER: 60/183,62	PILE REPERBNCE: MRI-007BCN CURRENT APPLICATION NUMBER: US/10/35 CURRENT FILING DATE: 2003-02-04 BRICK ADDITON NUMBER: 0786 776		Publication GENERAL INFO APPLICANT: APPLICANT:
\$ B \$	9	δ β δ Σ	DB QY	D Qy	β · δ	D Qy	₽ Q	B &	B 8	Qy :	Qy Db :	Qy Db	B &	Qy Db	Qy Db	Db Qy
.673 CCTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGGCAGCAGCAGCAGCAGTACAGCGTT 1792		<pre>1493 CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCTCAGTC 1552 </pre>	AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGC	1373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA 1432 	1313 TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA 1312	1193 TITTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGAT 1252 	1133 ACTTTATCCCCGAGTCTCATTTCCTGCGTGTGGCTGTGAATGACAGCTTTTGTGAGAAAA 1192 	1073 TGATACAGCAGAATGGGATTGGTTTATGTGTTTAAATGCCAGCTATACCTGTCCAAAGCCTG 1132	1013 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC 1072	953 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1012	893 ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAA 952	833 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC 892	773 TTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	713 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA 772	653 CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC 712

2813 TTGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTTGGAGGACAAAATCCCCCTACCATTTTCAC 2872	2753 GATGCTAGAATCCCCCCTAGACGGAAGAAACCATTTTATTCAGTGAATTACACATCCTC 2812	2693 CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCA 2752 	2633 TATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT 2692	2573 TTTTCTTGTTCACAAAAAAATTCCCTGTAAATCTGAAATATATAT	2513 TGGAAATCATTGAGGTCTCCTGAGAAGAAGACACTTGTGACTTCTATAGACAATTTTTT 2572	2453 AGAACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGT	2393 TTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAG 2452 	2333 GGCGGCAGAAGCCAAGTGACAGAGCTGACTCGCCGGCGGAGCTGGCATGAAGAGAGCCCCT 2392	2273 ACTCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA 2332	2213 TIGCCACAGAGICCTCACACTICTACTCTGCCTCAGCCATCTACGGAGGGCAGIGCCAGIT 2272	2153 GGCACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATT 2212	2093 TCGGCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCCTGGCCTGGGCCTTAAGGGCT 2152	2033 TITTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTT 2092	1973 GCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGCAGTGGCACCGCCCAGAGGTCCC 2032	1913 GTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCAGGCCTTCAGACA 1972 	1853 CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGGAAACCA 1912		1784 CCTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGC
g &	р	ob da	Db Qy	B 8	B 8	유 성	Db Qy	B 8	Db Qy	ρb	Db Qy	D Q	g S	dd Qy	B &	₽ 2	D Qy	Db
3893 ACGCTGGCCGGCGTGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGAGCAAAGGGG		3773 GAGAGAGGCTTTAGTGAGGAAGGAATATTCAGAATAAAACGGTTGAGAAAGCTGAGAAGA	3713 CATGCGATGGGGCTGATGTTTCTATGATTGCCTCAGACTTTCACATTTACTAGTAGGGCT	3653 GGTACAAATTGCTGAGGAGAAGCAGGAAACCTGTTTCCTTAGTGGCTTTTATCCCCTCGG	3593 AATATGGCAGAATTTATAGGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAAA	3533 CAAAGCAGATGTTTTTGCCCTTTCTGCTTCACTGCATGGATACAGTTGGTAAAATGTAAT	3473 AAGCCAAATGTGAATTTATTTGGGTTGGTAGCAGAGCAG	3413 AATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA	3353 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC	3293 CTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC		3173 ATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGGT	<u>i=i</u>	3053 TGACAGCCGAGGGACACGAGCATCACTCTGCTGGACGACCATTAGGGGCCTTGCCAAGG	TAC			2863 TIGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTGGAGGACAAAATCCCCTACCATTTTCAC

THERAPY

읶

```
RESULT 4
US-10-357-930-21083
J Sequence 21083, Application US/10357930
Publication No. US20040259086A1
GENERAL INFORMATION:
APPLICANT: Schlegel. Robert
APPLICANT: Endege, Wilson
                                                                                                                                                                                S
                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                 片
                                                                                                                                                                                                                                                                                                                        ક
                                                                                                                                                                                                                                                                                                                                                                   음 성
                                                                                                                                                                                                                                                                                                                                                                                                                            닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음 중 음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                             4903
                                                                                                                                                                                           4853
                                                                                                                                                                                                                                                               4793
                                                                                                                                                                                                                                                                                                                                                                                                     4673
                                                                                                                                                                                                                                                                                                                                                                                                                                        4663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGTCCTCAGTCCTCAACCTACAATCACTGTATGGAATCGGTCCTGGCAGCTGAACATAGG
                                                                                                                                                                                                                                                    GCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTTGGATGTCTTTAGGTGGGGTGG
                                                                                                                                                                                                                                                                                               AGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                               TAGGGCTTCTCTGGCCATGGTCCCCCTTCCTTGGAACTGTGATGTTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAAGTGCTGGTCAACGATTTGAGTTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT
                                                                                                                                                                              TGGCTGG 4859
                                                                                                                                                                                                                                GCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTTGGATGTCTTTTAGGTGGGGTGG
                                                                                                                                                                                                                                                                                                                                                                   TAGGGCTTCTCTTGGCCATGGTCCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTCGTATCTCAGGTTTTTTCTCTGTTTTTTGAGAAATGGACAGTTTTTTTGACCAGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGGGGCTGGGCGGGTGTTGTCATTGTTCTTTTCCCTTCCTGTAAGTGTCGCTAGTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGGGGCTGGGCGGGTGTTGTCATTGTTCCTCTTTCCCTGTAAGTGTCGCTAGTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTT
                                                                                                                                                             4909
                                                                                                                                                                                                                                                                                                                                   4792
                                                                                                                                                                                                                                                                                                                                                                     4782
                                                                                                                                                                                                                                                                                                                                                                                                     4732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4302
                                                                                                                                                                                                                                                               4852
                                                                                                                                                                                                                                                                                                 4842
                                                                                                                                                                                                                                                                                                                                                                                                                                        4722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4012
                                                                                                                                                                                                                                4902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: MONAHAN, JOHN
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THER
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT PILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 60/185,276
PRIOR FILING DATE: 2003-02-16
PRIOR FILLING DATE: 2000-02-17
PRIOR FILLING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/189,862
PRIOR FILLING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 
                                              S
                                                                                                            S
                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ર્ક
                                                                                     밁
                                                                                                                                                문
                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; NAME/KEY: misc_feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n =
US-10-357-930-21083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 4683; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo :
FEATURE:
                                                       653
                                                                                                                                                           584
                                                                                                                                                                                           533
                                                                                                                                                                                                                             524
                                                                                                                                                                                                                                                                                                                                                                                                                                       344
                                                                                                                                                                                                                                                               473
                                                                                                                                                                                                                                                                                                 464
                                                                                                                                                                                                                                                                                                                                 413
                                                                                                                                                                                                                                                                                                                                                                     404
                                                                                                                                                                                                                                                                                                                                                                                                   353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              224
                                       CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                       CGCTGGCTGCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                                                                                                                                                                                                                                                                                                                                                   GAGAAAGAGACATTCACTTGGAGGGCTCTTGCCTGAAAATGGGTTTAACTCTCCTTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                      GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTTGCC
                        CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                             TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                             TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                               ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                  ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A,T,C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 4413; DE Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ဇ္
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  띪
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>س</u>
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
```

5145; 1;

Gaps

232

712 703 652 643

583

523 472 412 403

463

343

292 283

2873 GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT 2932		GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA 1	Ŋ,
2813 TTGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTTGGAGGACAAAATCCCCCTACCATTTTCAC 2872	Qy Db	1733 CCTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGC	B 8
2753 GATGCTAGAATCCCCCCTAGACGGAAGACCATTTTATTCAGTGAATTACACATCCTC 2812	Qy	1673 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT 1732	유 성
93 43	Qy Db	1613 GCGTGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAAGG 1672	유 성
2633 TATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT 2692 	Qy da	1553 CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGACAGAGGCCGGTGCATCCCGCCA 1612	라 성
2573 TTTTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	Qy	1493 CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCTCAGTC 1552	B 8
2513 TGGAAATCATTGAGGTCTCCTGAGAAGAAAGACACTTGTGACCTCTATAGACAATTTTTT 2572 	ОУ	1433 AGAACCAGACTUGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCTGCACCTGGAGAAGC 1492 	음 성
53 04	Qy Db	1373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA 1432 	B &
2393 TTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAG 2452 	Qy Db	1313 TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	음 성
	Ωy	1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCACCATCGCTATCGCCTACA 1312	유 성
	Οy	1193 TITTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGAT 1252 	β Q
13 64	- P - Q	1133 ACTITATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA 1192 	D 09
53 04	D QY	1073 TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG 1132 	유 성
2093 TCGCCTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCT 2152	QУ	1013 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGG 1072	B 8
	dd dd	953 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1012	유 성
	d dd	893 ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAA 952	음 성
GTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA	, p 5	833 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAAACTGGAGAAGAGCTTCAACTCTGTTC 892	유 성
1853 CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCA 1912 	D CS	773 TIGATIGCAGICAGAAGGIIGTAGIITACGAICAAAGCICCCAAGAIGTIGCCICTCICT 832	B 8
	da	713 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA 772 	문왕

중 유

3833 CCATTGAGTTTTGATCAGTTGTGAATAGAGTGCAAAGCCATGGCCAAGCTGTTTTTTGAA 3892	2923 GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGCCCGGACCCTTCCATAGTACACCT 2982 2933 TAGCCCTGAACCTCACCCACGACCCTTCGCGACCCTTCAGGACCAGAGCCC 2992 2933 TAGCCCTGAACCACAGACACCAGACCATTAGTACCCCTCGATAGGACCAGACCCAGACCCAGACCCAGACCCAGACCCAGACCCAGACCCAGACCCAGACCCAGACCCAGACCCACCCAGACCCAGACCCAGACCCACCAC
RESULT 5 US-10-357-930-21303 US-10-357-930-21303 IS-quence 21303, Application US/10357930 ; Publication No. US20040259086A1 ; GENERAL INFORMATION: ; APPLICANT: Schlegel. Robert ; APPLICANT: Endege, Wilson ; APPLICANT: Endege, Wilson ; APPLICANT: MONAHAN, John ; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR ; TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF ; TITLE OF INVENTION: HUMAN PROSTATE CANCER	9y 4013 AGETROCTEGANACHGENANTGCCGANTGGCTTTCAMACHTCTTGGCTTTGAGTTT 4072 1053 AGETROCTEGANACHGTGANATGCCGANTGGCTTTCAMACHTCTTGGCTTTGAGTTT 4072 1074 1073 TATCAGCTACAAATGTGGGTCTTCTTTTTAAAGCCTTAATTCCCTTCCGTAAAGCGAAAGCAGCAGCTTTTTTGGGGAATGTGGTATTGGAAATGGACAAAGCAAGC

8

र् 밁 ঠ ঠ 밁 S

र्

ঠ 밁 र् В

중 음 중

밁

중 유

ঠ 밁

밁

```
밁
                                                   5
                                                                                    멍
                                                                                                                Ś
                                                                                                                                             밁
                                                                                                                                                                 Ś
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; NAME/KBY: misc_feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n = A,T,
US-10-357-930-21303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: MRI-007BCN
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-02-17
PRIOR FILING DATE: 2000-02-17
PRIOR FILING DATE: 2000-03-16
PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR FILING DATE: 2000-05-25
PRIOR FILING DATE: 2000-05-25
PRIOR FILING DATE: 2000-05-26
PRIOR FILING DATE: 2000-05-29
PRIOR FILING DATE: 2000-05-29
PRIOR FILING DATE: 2000-05-29
PRIOR FILING DATE: 2000-05-29
PRIOR PILING DATE: 2000-05-29
PRIOR APPLICATION NUMBER: 60/21,314
PRIOR FILING DATE: 2000-05-29
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR PILING DATE: 2000-12-13
NUMMERC POF SEOT TO NOC. 62020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 4683; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 21303
LENGTH: 5145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 62232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                      713
                                764
                                                                                      704
                                                                                                                653
                                                                                                                                             644
                                                                                                                                                                       593
                                                                                                                                                                                                  584
                                                                                                                                                                                                                             533
                                                                                                                                                                                                                                                         524
                                                                                                                                                                                                                                                                                    473
                                                                                                                                                                                                                                                                                                                 464
                                                                                                                                                                                                                                                                                                                                           413
                                                                                                                                                                                                                                                                                                                                                                        404
                                                                                                                                                                                                                                                                                                                                                                                                                               344
                                                                                                                                                                                                                                                                                                                                                                                                   353
                                                                                                                                                                                                                                                                                                                                                                                                                                                         293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   173 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                        AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                      AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                              CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                             CATCCCACATTITGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                    TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                           TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                           TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                              GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTTGCC 412
                                                                                                                                                                                                                                                  ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                   ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGGCTTATTG
                                                                                                                                                                                                                                                                                                          AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                          AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGGTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                 GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                      ATCAAATGTGAGGGGTTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCAAATGTGAGGGGCTGCTTTGTGGAACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA 352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGCTGGCTGCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGCTGGCTGCCTAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 4413; DB Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1;
                         823
                                                   772
                                                                              763
                                                                                                                                     703
                                                                                                                                                                652
                                                                                                                                                                                            643
                                                                                                                                                                                                                                                                              532
                                                                                                                                                                                                                                                                                                          523
                                                                                                                                                                                                                                                   583
                                                                                                                                                                                                                                                                                                                                      472
                                                                                                                                                                                                                                                                                                                                                                 463
                                                                                                                                                                                                                                                                                                                                                                                                                        403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  232
                                   밁
        δ
                                                           δ
                                                                                       밁
                                                                                                                Ş
                                                                                                                                                뭐
                                                                                                                                                                      Ś
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                    맑
                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
        1853
                                                                                                                                                1724
                                                                                                                                                                            1673
                                                                                                                                                                                                        1664
                                                                                                                                                                                                                                 1613
                                                                                                                                                                                                                                                             1604
                                                                                                                                                                                                                                                                                          1553
                                                                                                                                                                                                                                                                                                                    1544
                                                                                                                                                                                                                                                                                                                                                                                                        1433
                                                                                                                                                                                                                                                                                                                                                 1493
                                                                                                                                                                                                                                                                                                                                                                           1484
                                                                                                                                                                                                                                                                                                                                                                                                                                    1424
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               773
CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGGACTCCCGAAACCA 1912
                                                                                                  CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT
                                                                                                                                                          CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT
                                                                                                                                                                                                                 GCGTGCCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGG
                                                                                                                                                                                                                                                                         CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGCACAAAGGCCCGTGCATCCCGCCA 1612
                                                   GCTTCTCCTCATCAGAAGATGCTTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA 1852
                                                                                                                                                                                                  GCGTGCCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGG
                                                                                                                                                                                                                                                       CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGCCA
                                                                                                                                                                                                                                                                                                                CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTC
                                                                                                                                                                                                                                                                                                                                                                     AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCAGCTGGAGGAAGC
                                                                                                                                                                                                                                                                                                                                CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                            CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                             CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA 1432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAAGAAAAAAAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCCAAAAGCCTCCAATGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTTIATCCCCGAGTCTCATTTCCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGATGCAGCAGAATGGGATTGGTTAATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACCIGCTIGCAGGIGGGTITGCTGAGTICTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC
                                                                                    1843
                                                                                                                                          1783
                                                                                                                                                                                                  1723
                                                                                                                                                                                                                             1672
                                                                                                                                                                                                                                                         1663
                                                                                                                                                                                                                                                                                                                1603
                                                                                                                                                                                                                                                                                                                                           1552
                                                                                                                                                                                                                                                                                                                                                                       1543
                                                                                                                                                                                                                                                                                                                                                                                                   1492
                                                                                                                                                                                                                                                                                                                                                                                                                            1483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           832
```

8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8
GGCACTGGGATATCTTGGCCCCCCAACCCTTTCCCTGACCACTGCACTGGATT	
	· · · · · · · · · · · · · · · · · · ·
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	8 8 8 8 8 8 8 8
2233 CCANTICANACTOTCTNTGCACANANTTCCCGTGGGCCTAGATGGAGATNATTTTTTTTT 329 2283 CCANTICAACCTGTTATGCACAAACTGTCTTTTTTT 3292 2293 CTTCTCAGCTTTATGAAGAGGAAAGCGAAACTGCTTAGGATTCAGCTGAACCACCAGGAACC 2393 CTTCTCAGCTTTATGAAGAAGAGGAAACTGCTTAGGATTCAGCTGAACCACCACGAGAACC 2393 TGGCAACATCACGATTTAAGCTTAAGCTTAGGATTCAGATTCAGCTGAACCACCACGAGACC 2393 TGGCAACATCACGATTTAAGCTTAAGCTTAGGATTCGATCAGATTCACTCCCCTCTTTGTA 3412 2403 TGGCAACATCACGATTTAAAATGGGATTGTCAATCCTTTAAAAAAACTTAACTTCGTTTC 3472 2413 AATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAAAAAACTGAACCTTCGTTTC 3472 2413 AATCAAAGAATTGTTTAAAATGGGATTTGTAAACATCCTTTAAAAAAACATGAATTCAATTCAAAACATTCAATTCAAACATTCACTCCCTCTTTGTA 3462 2413 AAACCAAAATTGTTATATTTGGGTTTGTAACCAAACCACCACCTCCTCAAATTCAACC 2513 AAGCCAAAATTGTTATATTTGGGTTTGTAACAAAACCAACC	2983 TAGCGCTGAGACTGAGCCAGCTTGGGGGTCAGGTAGGTAG

```
RESULT 6
US-10-357-930-21307

(Sequence 21307, Application US/10357930)

(Publication No. US20040259086A1)

(GENERAL INFORMATION:

APPLICANT: Schlegel. Robert

APPLICANT: Endege, Wilson

APPLICANT: Monahan, John

TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR

TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THEF

TITLE OF INVENTION: HUMAN PROSTATE CANCER

FILE REFERENCE: MRI-007BCN

CURRENT FILING DATE: 2003-02-04

CURRENT FILING DATE: 2003-02-04

PRIOR APPLICATION NUMBER: 09/785,276
                                                                                                                                                                                                                                                     4903
                                                                                                                                                                                                                                                                                                            4843
                                                                                                                                                                                                                                                                                                                                       4793
                                                                                                                                                                                                                                                                                                                                                                   4783
                                                                                                                                                                                                                                                                                                                                                                                                                                                     4673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4073
                                                                                                                                                                                                                                                  TGGCTGG 4859
                                                                                                                                                                                                                                                                                                       GCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTTGGATGTCTTTAGGTGGGGTGG
                                                                                                                                                                                                                                                                                                                      GCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAGGTGGGGTGG 4852
                                                                                                                                                                                                                                                                                                                                                            AGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAGGGCTTCTCTTGGCCATGGTCCCCTTCCTTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                      TAGGGCTTCTTGGCCATGGTCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGGGGCTGGGCGGGTGTTGTCATTGTTCTTTCCCTTCCTGTAAGTGTCGCTAGTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TATCAGCTACAAIGTGGGTCCTCTTTTGAAGCCTTAATTCACAACAGCAGCTTTTTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAGTGCTGGTCAACGATTTGAGTTAGGTTTTAGATATACATTGAAATCTTTAATCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA 4312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG
                                                                     THERAPY
                                                                                                                                                                                                                                                                                                                                                                                        4792
                                                                                                                                                                                                                                                                                                       4902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4672
                                                                                                                                                                                                                                                                                                                                                               4842
                                                                                                                                                                                                                                                                                                                                                                                                                     4782
                                                                                                                                                                                                                                                                                                                                                                                                                                                4732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4252
                                                                      ဝ္ဗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; LENGTH: 5145
; TYPE: DNA
; ORGANISM: Homo sapiens
; PEATURE:
; NAME/KEY: misc feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n = A,
US-10-357-930-21307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 2003-02-16
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/189,862
PRIOR PILING DATE: 2000-02-17
PRIOR PILING DATE: 2000-03-16
PRIOR PILING DATE: 2000-03-16
PRIOR PILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/217,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-06-09
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR DATE: PASTSEQ for Windows Version 4.
PRIOR DATE: FASTSEQ FOR WINDOWS VERSION 4.
                                     S
                                                            밁
                                                                                        Ş
                                                                                                                        8
                                                                                                                                               Ś
                                                                                                                                                                           ਰ
                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                δ.
                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                  뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
             824
                                        773
                                                                   764
                                                                                              713
                                                                                                                           704
                                                                                                                                                      653
                                                                                                                                                                                   644
                                                                                                                                                                                                                593
                                                                                                                                                                                                                                            584
                                                                                                                                                                                                                                                                      533
                                                                                                                                                                                                                                                                                                  524
                                                                                                                                                                                                                                                                                                                                                            464
                                                                                                                                                                                                                                                                                                                                                                                       413
                                                                                                                                                                                                                                                                                                                                                                                                                  404
                                                                                                                                                                                                                                                                                                                                                                                                                                               353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4683;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       173 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                                               Similarity
                        CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                                                                                                              ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                              GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
          CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                        TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                       TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                              TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                                                                                        AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTGGCTCCAAAGCATCTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGCTGGCTGCTCCAAAGCATCTTTTGTTGGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                                                                                                                                                                                                                                                                                                                                         AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A,T,C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                <u>د</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                     832
                                                                823
                                                                                           772
                                                                                                                                                   712
                                                                                                                                                                                                              652
                                                                                                                          763
                                                                                                                                                                                 703
                                                                                                                                                                                                                                                                    592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  352
                                                                                                                                                                                                                                         643
                                                                                                                                                                                                                                                                                                                                                       523
                                                                                                                                                                                                                                                                                                 583
                                                                                                                                                                                                                                                                                                                            532
                                                                                                                                                                                                                                                                                                                                                                                                                 463
                                                                                                                                                                                                                                                                                                                                                                                                                                            412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             292
                                                                                                                                                                                                                                                                                                                                                                                    472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        283
```

망

Ś 밁 Ś 뭐 Ś 밁 8 밁 S 밁 S 밁 S

Ş 밁

음 성

음 성 음 성

음 성

В Ś 밁 Ś

& B &	B 8	g &	B &	B 8	Db Qy	유 성	B 8	dg VQ	용 성	ይ <i>ጿ</i>	D Q	Q Qy	ያ ያ	P &	B &	당 상	당 &
1903 CTMCHARGE AT SCIENCE IN INCIDENT CHARGE AND AN INCIDENT COMPARED CARRANCE AND AND AND AND AND AND AND AND AND AND	GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA 1852	1733 CCTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGC	1673 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCCTCAAGCGTT 1732	1613 GCGTGCCCAGCGTGCCAGCGTGCAGCCGTCGTTAGAGGACAGCCCGCTGGTACAGG 1672	1553 CACCCTGTGCCGACTCTGCTACCTCAGAGGCCAGCAGACAAAGGCCCGTGCATCCCGCCA 1612	1493 CARATGRACCTGTCCCTGCTGTCTCAGAGGGTGGACAGARARAGCGAGACGCCCCTCAGTC 1552	1433 AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGC 1492	1373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATA 1432	1313 TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCACCACCATCGCCTACA 1312	1193 TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGAT 1252	1133 ACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA 1192	1073 TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG 1132 - - - - - - -	1013 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGG 1072	953 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1012	893 ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAA 952	833 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC 892 884 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC 943
ΩУ	8 B 8						g 2							B &	?	, B &	<u> </u>
2983 TAGCGCTGAGACTGAGCCAGCTTGGGGGTCAGGTAGGTAG	2923 TAGCGCTGAGACTGAGCCAGCTTGGGGGGTAGGTAGACCCTGTTAGGC	ZB13 TIGTICTIANAMARCHAGISTCTITIGSTETTIGAGGACAMARICCCCTACE	2753 GATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTATTCAGTGAATTAC	2693 CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATG	2633 TATTTTTGGAAAATGGAGTATGGTGTAAAAGCAACAGGTGGATCAACCCAG	2573 TTTTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	2513 TGGARATCATTGRGGTCTCCTGRGARGARGACRCTTGTGACTTCTATRGRGT	245 3 AGAACAGGTCACGGGAAAGCTGGGGAAAGTGGGCAGTCTAGCTTTTC	2393 TTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGGAGCAT	233 GGCGGCAAAAGCCAAGTGACAGAGCTGACTTGGCGGGGGGGG	2273 ACTOTIGCOTACAGOTIGCAGCCAGOTIGCCCACTTIGCIGAGACCAAGTICTATTC	2213 TIGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAG	2153 GGCACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTTCCCTGACCAGCAGCTGGTATT				

COLLAWOLC LANGUAGE AND ANTICOGREGAGE AND CONTROL OF THE COLLAWOLC LANGUAGE AND CONTROL OF THE COLLAWOLC COLLAWOLC CONTROL OF THE COLLAWOLC COLLAWOLC CONTROL OF THE COLLAWOLC COLLAWOLC COLLAWOLC CONTROL OF THE COLLAWOLC COLLAWOLC COLLAWOLC COLLAWOLC COLLAWOLC COLLAWOLC COLLAWOLC COLLAWOLC COLLAWOLC COLLAWOL	1833 CCATTGAGTTTTGATCAGTTGTGAATAGAGTGCAAAGCCATGGCCAAGCTGTTTTTTGGAA 389	3713 CATGCGATGGGGCTGATGTTTCTATGATTGCCTCAGACTTTCACATTTACTAGTAGGGCT 3772	3593 AATATGGCAGAATTTATAGGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAAA 3652	3473 AAGCCAAATGTGAATTTATTTGGGTTGGTAGCAGAGCAG	3353 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC	3233 CCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGATAATTTTTTTT	3043 TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC 3102 3053 TGACAGCCGAGGGACACCACCACTCTCTCTGCTGACCGACC
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF TITLE OF INVENTION: HUMAN PROSTATE CANCER FILE REFERENCE: MRI-007BCN CURRENT FILING NOWHER: US/10/357,930 CURRENT FILING DATE: 2003-02-04 PRIOR APPLICATION NUMBER: 09/785,276 PRIOR APPLICATION NUMBER: 09/785,376 PRIOR APPLICATION NUMBER: 06/183,319 PRIOR APPLICATION NUMBER: 60/189,862	RESULT 7 US-10-357-930-22820 Sequence 22820, Application US/10357930 Publication No. US20040259086A1 GENERAL INFORMATION: APPLICANT: Schlegel. Robert APPLICANT: Endege, Wilson APPLICANT: Monahan, John	QY 4/93 GCGAAGGGTCTCGGAGGCTCTCGGAGCTGCTTTTAGGTGGGGTGG 4852	4673 4723 4733 4783	4553 GTT 4603 GTT 4613 TCC 4613 TCC 4663 TCC	Qy 4433 AAACTGCTGGTCAACGAITTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC 4492	4313 CCC 4363 CCC 4373 GCT 4373 GCT 4423 GCT	4133 4183 4193 42243 4253

유 상

음 성 음 성

B 6

В

8 8 8

음 성 음

Ş

음 성 음

8 8 8

음 성

음 성

8 8 8 8 8 8 8 8 8 8 8

Qy 833 CITCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC 892	Oy 773 TTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	Qy 713 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA 772	Qy 653 CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGGGAAGGTTGC 712	Qy 593 TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA 652	Qy 533 TTGTCATGGCCCATGAGATGATTGGAAATTGTTACTGAGAGGTTGGTGGCTCTGC 592	Qy 473 ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGGAGGACTTATTG 532	Qy 413 AGTCACCAGCCTGACCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC 472	Qy 353 GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC 412	Qy 293 ATCAAATGTGAGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA 352	Qy 233 CGCTGGCTGCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA 292	TTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG 23	Query Match 81.0%; Score 4413; DB 18; Length 5145; Best Local Similarity 99.9%; Pred. No. 0; Matches 4683; Conservative .0; Mismatches 3; Indels 1; Gaps 1;	S-1	LENGTH: 514 TYPE: DNA ORGANISM: H PEATURE:	PRIOR FILING DATE: 2000-12-13 NUMBER OF SEQ ID NOS: 62232 SOFTWARE: PastSEQ for Windows Ver SEO ID NO 22820	FILING DATE: 2000-06-09 APPLICATION NUMBER: 60/219, FILING DATE: 2000-07-18 APPLICATION NUMBER: 60/255.	; PRIOR FILING DATE: 2000-03-16 ; PRIOR APPLICATION NUMBER: 60/207,454 ; PRIOR FILING DATE: 2000-05-25 ; PRIOR APPLICATION NUMBER: 60/211,314
Db 1964 GTCCTGATAAGGAGGAAGCCAGCCTCAAGAAGCTGCAGACCGCCCAGGCCTTCAGACA 2023 Oy 1973 GCCAGAGCAAGCGATTGGATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCC 2032	1904	1844	1733 CCTTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATG	1673 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT	1613 GCGTGCCCAGCGTGCCAGCCTGCAGCCGCTGTTAGAGGACAGCCCGCTGGTACAGG	Db 1604 CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGCCA 1663	1493 CARATGARCCTGTCCCTGCTGTCTCRAGAGGTGGACAGAAAAGGGAGACGCCCCTCAGTC	1433 AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTGCAGCTGCAGCTGGAGAAAGC	CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA [1313	1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA	Qy 1193 TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGAT 1252	Qy 1133 ACTITATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA 1192	Oy 1073 TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG 1132	Qy 1013 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCAGATGTCCTCAACAAGGAGC 1072	OY 953 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1012	Qy 893 ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAA 952

, 8	D Q	B &	Db Qy	g Q	B &	Qy db	D Q	ОУ	Qу	ру	Db Qy	B &	9 8	Qy Db	Db Qy	B &	B 8	Db
3053 TGACAGCCGAGGACACGAGCATCACCTCTGCTGGACGGAC	2993 TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC 3052	2933 TAGCGCTGAGACTGAGGCCAGCTTGGGGGTCAGGTAGGTA	2873 GITGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT 2932	2813 TIGITCITAAAAAAGCAAGTGTCTTTGGTGTTGGAGGACAAAATCCCCTACCATTTTCAC 2872 	2753 GATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTC 2812	2693 CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAATGGAAGGGCA 2752 	2633 TATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT 2692 	2573 TITICTIGITCACAAAAAATTCCCTGTAAATCTGAAATATATATATGTACATACA	2513 TGGAAATCATTGAGGTCTCCTGAGAAGAAGAAGACTTGTGACTTCTATAGACAATTTTTT 2572 	2453 AGAACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGT	2393 TTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAG 2452	2333 GGCGGCAGAAGCCAAGTGACAGAGCTGACTCGCCGGCGGAGCTGGCATGAAGAGAGAG	2273 ACTCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA 2332	2213 TTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTT 2272	2153 GECACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCCTGACCAGCAGCTGGTATT 2212	2093 TCGGCCTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCT 2152	2033 TITTATCTCCACTGCATGGAAGTGGGAGGGAGGACAATTACCACACCAGCTTCCTTT 2092	44
Db Qy	B Q	Д	ρb	Qγ	ρb	ОУ	da da	dd VQ	, p .Q	dd Ao	dg dg	Οy	D Qy	Db Qy	, B &	, B &	D 5	₹ ₽
4133 GTGGGGCTGGGCGGGTGTTGTCATTGTTCTTTCCCTTCCTGTAAGTGTCGCTAGTTGCTG 4192	4073 TATCAGCTACAATGTGGGTCCTCTTTGAAGCCTTAATTCACAACAGCAGCTTTTTGGGG 4132	4013 AGGTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTT 4072	3953 CGTCCTCAGTCCTCAACCTACAATCACTGTATGGAATCGGTCCTGGCAGCTGAACATAGG 4012	3893 ACGCTGGCCGGCGTGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGAGCAAAGGGG 3952 	3833 CCATTGAGTTTTGATCAGTTGTGAATAGAGTGCAAAGCCATGGCCAAGCTGTTTTTGGAA 3892 	3773 GAGAGAGGCTTTAGTGAGGAAGGAATATTCAGAATAAAACGGTTGAGAAAGCTGAGAAGA 3832 	3713 CATGCATGGGGCTGATGTTTCTATGATTGCCTCAGACTTTCACATTTACTAGTAGGGCT 3772	3653 GGTACAAATTGCTGAGGAGAAACCAGGAAACCTGTTTCCTTAGTGGCTTTTATCCCCTCGG 3712	3593 AATATGCAGAATTTATAGGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAAA 3652	3533 CAAAGCAGATGTTTTTGCCCTTTCTGCTTCACTGCATGGATACAGTTGGTAAAATGTAAT 3592 	3473 AAGCCAAATGTGAATTTATTTGGGTTGGTAGCAGGAGCAGCACCTTCAAATTCTCAGC 3532	3413 AATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA	3353 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC				C ACC 1 AGACCAMAC C CAG ACC CAGACAGGAAAG CGGGGTT CGCTACCAT C ACC CAGACAGGAAAG CGGGGCTT CACCACTACCAT C ACC CAGACAGGAAAG CGGGGCTT CACCACTACCAT C CGGGGCTT CGGGCTACCAT C CGGGGTACCCATACCAT C CGGGGTACCCATACCAT C CGGGGTACCCATACCATACCATACCATACCATACCATAC	TGACAGCCGAGGGACACGAGCATCACTCTGCTGGACGGAC

```
# Sequence 26669, Application US/10357930

# Publication No. US20040259086A1

# GENERAL INFORMATION:
# APPLICANT: Schlegel: Robert
# APPLICANT: Schlegel: Robert
# APPLICANT: Schlegel: Robert
# APPLICANT: Monahan, John
# TITLE OF INVENTION: HOWEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
# TITLE OF INVENTION: HOWAN PROSITATE CANCER
# TITLE OF INVENTION: HUMAN PROSITATE CANCER
# FILE REPERENCE: MRI-007BCN
# CURRENT APPLICATION NUMBER: US/10/357,930
# CURRENT APPLICATION NUMBER: 09/785,276
# PRIOR APPLICATION NUMBER: 60/183,319
# PRIOR PILING DATE: 2003-02-16
# PRIOR PILING DATE: 2000-03-16
# PRIOR PILING DATE: 2000-03-16
# PRIOR APPLICATION NUMBER: 60/189,862
# PRIOR APPLICATION NUMBER: 60/189,862
# PRIOR APPLICATION NUMBER: 60/207,454
# PRIOR APPLICATION NUMBER: 60/207,454
# PRIOR APPLICATION NUMBER: 60/211,314
                                                                                                                                                                                                                                                                                           RESULT 8
US-10-357-930-26669
                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                      र्
                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                    음 중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              음 중 음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                  4903
                                                                                                                                                                                                                                                                                                                                                                                                       4843
                                                                                                                                                                                                                                                                                                                                                                                                                                4793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4243
                                                                                                                                                                                                                                                                                                                                                                TGGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTTGGATGTCTTTAGGTGGGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAAATCGAGACTGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAGGGCTTCTCTTGGCCATGGTCCCCTTCCTTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCTTGCTAACGATGTTTCAGGACGTTTGGGGCACTTGGTTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTACACACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAGGGCTTCTCTTGGCCATGGTCCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGGCACTTGGTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA
                                                                                                                                                                                                                                                                                                                                                  4909
                                                                                                                                                                                                                                                                                                                                                                            4859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4312
                                                                                                                                                                                                                                                                                                                                                                                                                                4852
                                                                                                                                                                                                                                                                                                                                                                                                                                                             4842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; PRIOR FILING DATE: 2000-06-09
; PRIOR APPLICATION NUMBER: 60/219,007
; PRIOR FILING DATE: 2000-07-18
; PRIOR APPLICATION NUMBER: 60/255,281
; PRIOR FILING DATE: 2000-12-13
; NUMBER OF SEQ ID NOS: 62232
; SOFTWARE: FastSEQ for Windows Version 4.
; SEQ ID NO 26669
; LENGTH: 5145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; NAME/KEY: misc feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n =
US-10-357-930-26669
                                       δ
                                                                      밁
                                                                                       5
                                                                                                                  문
                                                                                                                                             5
                                                                                                                                                                               밁
                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                          망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4683;
                                             893
                                                                        884
                                                                                                 833
                                                                                                                            824
                                                                                                                                                                                                                                                                653
                                                                                                                                                                                                                                                                                            644
                                                                                                                                                                                                                                                                                                                    593
                                                                                                                                                                                                                                                                                                                                                 584
                                                                                                                                                                                                                                                                                                                                                                                                       524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           353
                   944
                                                                                                                                                      773
                                                                                                                                                                                 764
                                                                                                                                                                                                          713
                                                                                                                                                                                                                                       704
                                                                                                                                                                                                                                                                                                                                                                          533
                                                                                                                                                                                                                                                                                                                                                                                                                                473
                                                                                                                                                                                                                                                                                                                                                                                                                                                             464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 224
                                                                                                                                                                                                                                    CGCTGGCTCCAAAGCATCTITTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                  ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAA 952
                                                                                     CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTTCAACTCTGTTC
                                                                                                                                                                                 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                   AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                                                                                                                                                                 TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                     ACACCACCATTACATCATCGTGGCAAATTAAAGAAGAGGGTGGGAAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                                                                                                              TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTTGCC
                   ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTTGGCCTCTGTGAAGGAA
                                                                         CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC
                                                                                                                                                                                                                                                                                            TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                                                                                            TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                       ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A,T,C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 4413;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ŭ
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                   1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             343
                                                                        943
                                                                                                   892
                                                                                                                            883
                                                                                                                                                      832
                                                                                                                                                                                                                                       763
                                                                                                                                                                                                                                                                                            703
                                                                                                                                                                                                                                                                                                                      652
                                                                                                                                                                                                                                                                                                                                                 643
                                                                                                                                                                                                                                                                                                                                                                            592
                                                                                                                                                                                                                                                                                                                                                                                                        583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  352
                                                                                                                                                                                                                                                                                                                                                                                                                                532
                                                                                                                                                                                                                                                                                                                                                                                                                                                             523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 283
```

8	당 왕	B 8	ОУ	Db Oy	ОУ	D Q	d dy	B 8	B 8	B 8	B &	Qy da	₽ Q	B 8	D Qy	Db Qy	D 29	D 92
2033 TTTTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTT 2092	1973 GCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGGGTGGCACCGCCCAGAGGTCCC 2032	1913 GTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA 1972 	1853 CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCA 1912 	1793 GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA 1852 	1733 CCTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGC	1673 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCGAATAAGCTCAAGCGTT 1732 	1613 GCGTGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGG 1672	1553 CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGACGAGCAGGACCAAGGCCCGTGCATCCCGCCA 1612	1493 CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGACGCCCTCAGTC 1552 	1433 AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGC 1492 	1373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA 1432 	1313 TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	1253 GIGTICTAGIGCACTGITTAGCTGGGATCTCCCGGCTCCGCCACCACCATCGCCTATCGCCTACA 1312	1193 TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGAT 1252 	1133 ACTITATCCCCGAGICTCATITCCTGCGIGIGIGCATGAATGACAGCTTITGIGAGAAAA 1192 	1073 TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG 1132 	1013 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC 1072	953 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCCTACCTGTTGCCAACATTGGGC 1012
_		п.					-					<u>. </u>						
Ϋ́	B 62	B 43	B 8	B 8	B 8	B 8	B 64	₽ <i>Q</i>	B 8	Db Qy	D Qy	g Q	B 64	B 8	g 49	DD QY	Ωу	дь
3113 TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT	3053 TGACAGCCGAGGGACACGAGCATCACTCTGCTGGACGGAC	2993 TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC	2933 TAGCGCTGAGACTGAGCCAGCTTGGGGGTAAGATAGGTAAGACCCTGTTAGGGACAGACCC	2873 GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT	813 863	2753 GATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTC	2693 CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCA	2633 TATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT	2573 TITTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	2513 TGGAAATCATTGAGGTCTCCTGAGAAGAAAGACACTTGTGACTTCTATAGACAATTTTTT	2453 AGAACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGCTCTAGCTTTTCGGGCAGCA	2393 TTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGA	2333 GGCGGCAGAAGCCAAGTGACAGAGGCTGACTCGCGGCGAGCTGGCATGAAGAGAGCCCCT	2273 ACTETGCETACAGETGCAGCEAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA 2332	2213 TTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTT	2153 GGCACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATT		

Qy 3833 CCATTGAGTTTTGATCAGTTGTGATAGAGTGCAAAGCC	3293 3343 3403 3413 3413 3463 3523 3523 3523 3523 3643 3643 3703 3713 3713 3763	Db 3163 TCTACCTTAGAGCAAACCCAGTACCT Qy 3173 ATCTGGTAGCCCATTTTCTAGGCAT Db 3223 ATCTGGTAGCCCATTTTCTAGGCAT Qy 3233 CCAATTCAAACTGTCTATGCACAAA Qy 3233 CCAATTCAAACTGTCTATGCACAAAA Db 3283 CCAATTCAAACTGTCTATGCACAAAA Db 3283 CCAATTCAAACTGTCTATGCACAAAA
CCATTGAGTTTTGATCAGTTGTGAATAGAGTGCAAAGCCATTGGCAAGCTGTTTTTTGGAA 3892 [TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT 3222 ATCTGGTAGCCCATTTCTAGGCATTGTGAATAGGTAGGTA
RESULT 9 US-10-357-930-26815 Sequence 26815, Application US/10357930 Publication No. US20040259086A1 GENERAL INFORMATION: APPLICANT: Schlegel. Robert APPLICANT: Endege, Wilson APPLICANT: Monahan, John TITLE OF INVENTION: HUMAN PROSTATE CANCER FILE REFERENCE: HEILOFOCH CURRENT FILING DATE: 2003-02-04 PRIOR APPLICATION NUMBER: 09/785,276 PRIOR APPLICATION NUMBER: 09/785,276 PRIOR APPLICATION NUMBER: 09/183,319 PRIOR APPLICATION NUMBER: 60/183,319 PRIOR APPLICATION NUMBER: 60/183,319 PRIOR APPLICATION NUMBER: 60/183,319 PRIOR APPLICATION NUMBER: 60/183,319 PRIOR FILING DATE: 2000-02-17 PRIOR FILING DATE: 2000-03-16 PRIOR FILING DATE: 2000-03-16 PRIOR FILING DATE: 2000-03-16 PRIOR FILING DATE: 2000-05-25 PRIOR FILING DATE: 2000-05-25 PRIOR PRILING DATE: 2000-06-09 PRIOR PRILING DATE: 2000-06-09 PRIOR PILING DATE: 2000-06-09 PRIOR PILING DATE: 2000-07-18 PRIOR APPLICATION NUMBER: 60/215,281	TGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTATGATACTGGG TGCTGGTCAACGATTTGAAGTTAAGGTTATTTAGATATACAGCCGCATTGTTATCAGAC TGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC TCAAGTTTCACACAGTTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC TCAAGTTTCACACAGTAGTTTTTTAGATATACATTGAAATCTTTAATCAGAC TCAAGTTTCACACAGTAGTTTTTTAGATTATACACACACA	Oy 4253 ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA 4312

Db 1004 AATCCACTCTAGTCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1063	944	Qy 833 CITCAGACTGTITTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC 892	Oy 773 TIGATIGCAGICAGAAGGITGIAGTITACGAICAAAGCICCCAAGAIGITGCCICICCICI	Qy 713 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA 772	QY 653 CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC 712	Qy 593 TGGAAAGTGGAAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA 652	Qy 533 TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC 592	Qy 473 ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAAGAGGACTTATTG 532	Qy 413 AGTCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCCTGAGCCTTTGAGC 472	Qy 353 GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC 412	Qy 293 ATCAAATGTGAGGGGTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA 352	Qy 233 CGCTGGCTGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA 292	G 23	Query Match 81.0%; Score 4413; DB 18; Length 5145; Best Local Similarity 99.9%; Pred. No. 0; Matches 4683; Conservative 0; Mismatches 3; Indels 1; Gaps 1;	; NAME/KEY: misc_feature ; LOCATION: 1, 5T44, 5145 ; OTHER INFORMATION: n = A,T,C or G US-10-357-930-26815	: LENGTH: 5145 ; TYPE: DNA ; ORGANISM: Homo sapiens ; FEATURE:	; PRIOR FILING DATE: 2000-12-13 ; NUMBER OF SEQ ID NOS: 62232 ; SOFTWARE: FastSEQ for Windows Version 4.0 ; SEQ ID NO 26815
	CCAGAGGTCCC	1913 GTCCTGATAAGGAGGCAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA		Qy 1793 GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA 1852	Qy 1733 CCTTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATG 1792	Qy 1673 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT 1732	Qy 1613 GCGTGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTTTAGAGGACAGCCCGCTGGTACAGG 1672		QY 1493 CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTC 1552	QY 1433 AGAACCAGACTGGAGCATCAGGGCCAAAGAAGCTCAAGCTGCAGCTGCACCTGGAGAAGC 1492	QY 1373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA 1432	QY 1313 TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	Qy 1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCGGCTCGCCACCATCGCTATCGCCTACA 1312	Qy 1193 TTTTGCCGTGGTTGGACAAATCAGTAGATTCATTGAGAAAGCCAAAAGCCTCCAATGGAT 1252	Qy 1133 ACTITATCCCCGAGTCTCATTTCCTGCGTGTGACTGAATGACAGCTTTTGTGAGAAAA 1192	Qy 1073 TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG 1132	QY 1013 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC 1072

ACTIONAL PRICE ACTION AC	3113 3163 3173	Oy 2993 TAG Db 3043 TAG Oy 3053 TGA Db 3103 TGA	2923 2933 2983	2813 2863 2873	275 3 2803	2693 2743	Qy 2633 TAT		2513 2564	Qy 2453 AGA Db 2504 AGA	Qy 2393 TTG	Qy 2333 GGC Db 2384 GGC	Qy 2273 ACT Db 2324 ACT	Qy 2213 TTC Db 2264 TTC	Qy 2153 GGC	Db 2144 TCG
Db 32212 2203 2212 2263 2263 2272 2272 2272 2272 2272 2272 2272 2272 2272 2272 2332 2333 2343 2443 2443 2572 2573 2572 2622 2742 2742 2742 2742 2742 2742 2742 2742 2742 2742 2742 2742 2743 2742 2742 2743 2744 2742 2742 2743 2744 2745 2742 2743 2744 2745 2747 274 274 274 274 274 274 274 274 274 274	ACCTTAGAGCAAACCCAGTACC	TGGTAAATCCAAGACAAATGA 	FIGCTACIANGAGATCTCAAAI	TTCTTAAAAAAGCAAGTGTCTT	3CTAGAATCCCCCCTAGACGGA 	TTAACATCTGCATTTGAGAGAJ TAACATCTGCATTTGAGAGAJ	TTTTGGAAAATGGAGCTATGGI TTTTGGAAAATGGAGCTATGGI	TCTTGTTCACAAAAAAATTCCC CTTGTTCACAAAAAATTCCC	naatcattgaggtctcctgagf naatcattgaggtctcctgag <i>f</i>	acaggtcacgggaagagctggg acaggtcacgggaagagctggg	naaagcagtttaaacgcagaac 	ggcagaagccaagtgacagag gcagaagccaagtgacagagc	CTGCCTACAGCTGCAGCCAGCT 	CCACAGAGTCCTCACACTTCTI 	ACTCGGATATCTTGGCCCCC/ ACTCGGATATCTTGGCCCCC/	GCCTTTCCACCAGCCAGCAGCAGCA
Db 32212 2263 2263 2263 2263 2263 2272 2272 2272 2272 2272 2272 2272 2272 2272 2332 2333 2343 2443 2443 2572 2573 2572 2622 2742 2742 2742 2742 2742 2742 2742 2742 2742 2742 2742 2742 2743 2742 2742 2743 2744 2742 2743 2744 2745 2747 2748 2749 2749 2740 2740 2741 2742 2743 2744 2744 2745 2746 2747 2747 2748	TCAGACAGGAAAGTCGGGGCTT	CCTATCCAAAGCTGATTCACA	ATTAGECTTIVECCGGACCCTG	TGGTGTTGGAGGACAAAATCC	(GAAAACCATTTTATTCAGTG) GAAAACCATTTTATTCAGTGI	CAGCTAATACTTCTCTCAACAJ	IGTAAAAGCAACAGGTGGATCA 	TGTAAATCTGAAATATATATATA TGTAAATCTGAAATATATATATA	VAGAAAGACACTTGTGACTTCTI VAGAAAGACACTTGTGACTTCTI	3GAAAGTGGGCAGTCAGTCTAG 3GAAAGTGGGCAGTCAGTCTAG	JCTGCCAAATGGAATTTGGAGA(TIGACTCGCGGCGGAGCTGGCA' 	IGCCCACTIGCGGAGACCAAGT	ACTCTGCCTCAGCCATCTACGG	AGACCTCTACCCCTTCCCTGAC	CCTCACGAAGTCTGCTGGCCT
3223 3233 3293 3293 3343 3343 3343 3343					0—0			ATATA ATATA								
3223 3233 3293 3293 3343 3343 3343 3343	·															
	D Q D Q	Qy Db	\$ B \$	B & B	S B S	g Q	용 &	B 8	명 <i>&</i>	B 8	B 8	B &	}	}	S B :	& B
- 0-0	4193 CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG					3773 GAGAGAGGCTTTAGTGAGGAAGGAATATTCAGAATAAAACGGTTGAGAAAGCTGAGAAGA	713 763	653 703	593 643	583	473 523	463	333 INGCARCA CACUMIII AND CIANGGI INGGANG CIANGGANG CIANGANG CIANGGANG CIANG	325 CITCLONG TITAL SANDSCANDS CONTROL OF CROSS AND		3223 ATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGGT

```
RESULT 10
US-10-357-930-26912
iSequence 26912, Application US/10357930
iPublication No. US20040259086A1
GENERAL INFORMATION:
APPLICANT: Endegel. Robert
APPLICANT: Endegel, Wilson
APPLICANT: Monahan, John
ITITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THER FILL OF INVENTION: UNMER: US/10/357,930
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT FILING DATE: 2003-02-04
PRIOR FILING DATE: 2003-02-16
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,862
PRIOR FILING DATE: 2000-03-16
PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILING DATE: 2000-01-2-13
NUMBER: 69 FEQ ID NOS: 62232
SOFTWARE: FASTSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4483
                                                                                                                                                                                                                                                                                                                                                                                                                                                             4853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4313
                                                                                                                                                                                                                                                                                                                                                                                                                                                            TEGCTEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTTGGATGTCTTTAGGTGGGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAGGGCTTCTCTTGGCCATGGTCCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATACATTGAAATCTTTAATCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                             4859
                                                                                                                                                                                                                                                                        THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; LENGTH: 5145
; TYPE: DNA
; ORGANISM: Homo sapiens
; PEATURE:
; PEATURE:
; NAME/KEY: misc feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n = A,
US-10-357-930-26912
                                   S
                                                              밁
                                                                                 S
                                                                                                                밁
                                                                                                                                   Ş
                                                                                                                                                           멍
                                                                                                                                                                                      S
                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Simi
Matches 4683;
                                                               1004
                                                                                        953
                                                                                                                944
                                                                                                                                          893
                                                                                                                                                                  884
                                                                                                                                                                                            833
                                                                                                                                                                                                                      824
                                                                                                                                                                                                                                              773
                                                                                                                                                                                                                                                                        764
                                                                                                                                                                                                                                                                                                                          704
                                                                                                                                                                                                                                                                                                                                                  653
                                                                                                                                                                                                                                                                                                                                                                           644
                                                                                                                                                                                                                                                                                                                                                                                                    593
                                                                                                                                                                                                                                                                                                                                                                                                                             584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                233
                                                                          AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC
                                                                                                                                                               Similarity
                     CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC
                                                                                                             ACCIGCTIGCAGGIGGGITTGCIGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAA
                                                                                                                                                                                                                 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGATGTAATG
          CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC
                                                                                                                               ACCTGCTTGCAGGTGGGTTTGCTGAAGTTCTCTCTGTTGTTGAAGGAA
                                                                                                                                                                                                                                                                                 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                                                                                                                                                     CATCCCACATITTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                                                                                                                                                                                        TGGAAAGTGGAACGGAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                                                                                                         TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                                                                                                                                           TIGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGCTGGCTGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                      CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                     AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A,T,C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 4413; DB; Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          о
К
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ۲,
                                   1072
                                                                                                                                       952
            1123
                                                            1063
                                                                                     1012
                                                                                                               1003
                                                                                                                                                                 943
                                                                                                                                                                                          892
                                                                                                                                                                                                                                             832
                                                                                                                                                                                                                   883
                                                                                                                                                                                                                                                                      823
                                                                                                                                                                                                                                                                                                                                                                                                  652
                                                                                                                                                                                                                                                                                               772
                                                                                                                                                                                                                                                                                                                                                                        703
                                                                                                                                                                                                                                                                                                                                                                                                                                                    592
                                                                                                                                                                                                                                                                                                                      763
                                                                                                                                                                                                                                                                                                                                                                                                                           643
                                                                                                                                                                                                                                                                                                                                               712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       283
```

Db 1904 Qy 1913 Db 1964 Qy 1973 Db 2024 Qy 2033 Db 2084 Qy 2093 Db 2144 Qy 2153	16 16 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	Qy 1073 Db 1124 Qy 1184 Qy 1193 Db 1244 Qy 1253 Db 1304 Qy 1313 Db 1364 Qy 1373 Db 1424 Qy 1433 Db 1484 Qy 1493 Db 1544 Qy 1553 Db 1553
CCAACAAGCTATGCCAC GTCCTGATAAGGAGGAA GTCCTGATAAGGAGGAATGGAGGAATTGGCCAAGCGATTGCACTGCATTTTTTTT	GCGTGCCCAGCGTGCCC GCGTCAGTGGCTGCAC GCGTCAGTGGGCTGCAC GCTTCAGTGGGCTGCAC GCTTCTCTCTCTGGATATC GCTTCTCTCTCTGAATATC GCTTCTCTCTCTCAATAATATC GCTTCTCTCTCTCAATAATATC GCTTCTCTCTCAATAATATC GCTTCTCTCTCAATAATATC GCTTCTCTCTCAATAATATC GCTTCTCCTCAATAATATC GCTTCTCCTCAATAATATATATATATATATATATATATAT	TGATACAGCAGAATGGG
CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTGCCGAAACCA [GCTTCTCTCTCTGGATATCAAATCAGTTTCATATTCAGCAGCAGCAGCATCGATGGAGGACAGC [TGATACAGCAGAATGGGATTGGTTATGTTTAAATGCCAGCTATACCTGTCCAAAGCCTG
CTATCGGAGCAGACTCC CTGCAGACCGGCCAGGCCT AGCAGTGGCACCGCCCAC AGCAGTGGCACCGCCCAC AGCAGTGGCACCGCCCAC AGCAGTGGCACCACCACCACCACCACCACCACCACCACCACCACCA	TTAGAGGACAGCCCGCTR 	GCCAGCTATACCTGTCCI
GAAACCA 1963	16 17 17 17 17 18 18 19	NAAGCCTG 1132
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$	<u> </u>	5
		2204 GGCACTCGGA 2213 TTGCCACAGA 2213 TTGCCACAGA 2214 TTGCCACAGA 2264 TTGCCACAGA 2273 ACTCTGCCTA 2324 ACTCTGCCTA 2324 ACTCTGCCAGAA 2333 GGCGGCAGAAA 2333 TTGAAAAAGCA 2393 TTGAAAAAGCA 2393 TTGAAAAACAC 2453 AGAACAGGTC 2414 TTGAAAATCAT 2513 TGGAAATCAT 2514 TGGAAATCAT 2514 TTTTCTTTGTT 2515 TTTTTCTTTTGAACAT 2633 TATTTTTTGGA 2633 TATTTTTTGGA 2693 CTCTTAACAT
TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC	CTCTTAACATCTGCATTTGAGAATCACCTAATACTTCTCTCACAAAAAATGGAAGGCCACTTTAACATCTTGCATCACAAAAATGGAAGGCCACTTTAACACTTTGCATCTACAAAAAATGGAAGGCCACTTTTAACACTTTTGCACTTAATACTTCTCTCAACAAAAATGGAAGGCAAGAGCATTTTAACACATTTGAGAAAAAAAA	
ATCCAAAGCTGATTCACJ	CTAATACTTCTCTCAACJ [
		~ ~~~ 3_3 4_4 5_5 6_6 6_5 8 8 8 8_

; LENGTY ; TYPE: ; ORGANI ; FEATUR	4313 CCGACTTGGTTATGGGGATGAGCCGCACAGACCTCACTAGTTGTGCACAATAATGT 4372
	4253 ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA 4312
	4193 CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAAATGGACAGTTTTTTGACCAGGATGTG 4252
	4133 GTGGGGCTGGGCGGGTGTTGTCATTGTTCTTTCCCTTCTGTAAGTGTCGCTAGTTGCTG 4192
	4073 TATCAGCTACAATGTGGGTCCTCTTTGAAGCCTTAATTCACAACAGCAGCTTTTTGGGG 4132
; FILE R ; CURREN ; CURREN ; PRIOR	4013 AGGTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTT 4072
	3953 CGTCCTCAGTCCTCAACCTACAATCACTGTATGGAATCGGTCCTGGCAGCTGAACATAGG 4012
	3893 ACGCTGGCCGGCGTGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGAGCAAAGGGG 3952
RESULT 11 US-10-357 ; Sequenc	3833 CCATTGAGITTTGATCAGITGTGAATAGAGTGCAAAGCCATGGCCAAGCTGTTTTTGGAA 3892
g dy	3773 GAGAGAGGCTTTAGTGAGGAAGGAATATTCAGAATAAAACGGTTGAGAAAGCTGAGAAAGA 3832
d da	3713 CATGCGATGGGGCTGATGTTTCTATGATTGCCTCAGACTTTCACATTTACTAGTAGGGCT 3772
Db	3653 GGTACAAATTGCTGAGGAGAAGCAGGAAACCTGTTTCCTTAGTGGCTTTTATCCCCTCGG 3712
Db Qy	3593 AATATGGCAGAATTTTATAGGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAAA 3652
Db	3533 CAAAGCAGATGTTTTTGCCCTTTCTGCTTCACTGCATGGATACAGTTGGTAAAATGTAAT 3592
d dd	3473 AAGCCAAATGTGAATTTATTTGGGTTGGTAGCAGAGCAG
D Qy	3413 AATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA
Qy	3353 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC
Ag Ag	3293 CITCTCAGCTITATGAAGAGAGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC 3352
>	w

片

Homo sapiens

밁 8 문 Ś 당 Ş 밁 Ś 문 S В Ś 문 Ş 문 Ş 밁 Ś 片 8 Б Ş В Ś 밁 Ş 밁 Ş B ક 밁 S 밁 Ś 밁

```
equence 26923, Application US/10357930
ublication No. US20040259086A1
ENREAL INFORMATION:
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
CUURRENT APPLICATION NUMBER: US/10/357,930
CUURRENT APPLICATION NUMBER: US/10/357,930
CUURRENT FILING DATE: 2003-02-14
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR PILING DATE: 2000-02-17
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR PILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR PILING DATE: 2000-03-16
PRIOR PILING DATE: 2000-05-25
PRIOR PILING DATE: 2000-05-25
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3 TGGCTGG 4859
|||||||
3 TGGCTGG 4909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAGGTGGGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGAAGGGTGGCTCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAGGTGGGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC 4492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAGGGCTTCTTGGCCATGGTCCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTTCACCACTTCCAGAGTGTGGTCATGCCCAAAAACATGTTTAAGAAAGGAAAGCAGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTTAAGAAAGGAAAGCAGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4482
```

OY 953 AATCCACTCTAGTCCCTACCTGCATTCTCAGCCTTACCTGTTGCCAACATTGGGC 1012 Db 1004 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1063 OY 1013 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC 1072	Oy 833 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAAACTGGAGAAGAGCTTCAACTCTGTTC 892	Oy 713 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA 772	OY 593 TGGAAAGTGGAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA 652	ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC	404 GAGAAGAGCATTACATCATCAGGAAAAAGGAAGGAAAAAAGGAAAAAAAGGAAAAAAAA	284 CGCTGGCTGCAAAAGCATCTTTTGTTGGAATGGTTATTCCAGTCATCTTTATGA 293 ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTTGCAAGAGCACATCAACGGGAAA	Matches 4683; Conservative 0; Mismatches 3; Indels 1; Gaps 1; Qy 173 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGAGCAAAGGTAAAGAATGATGTAATG 232	; NAME/KEY: misc_feature ; LOCATION: 1, 5144, 5145 ; OTHER INFORMATION: n = A,T,C or G US-10-357-930-26923 Query Match Best Local Similarity 99.9%; Pred. No. 0;
OY 2033 ITITARICICCACIGCARIGAGIGGIGGAGGACAATTACCACCAGCTICCTIT 2092	1913 GILCIGAL MANGHAGHAGUC AGUA I CUCHANGHAGU GUAGHAGU GA GUAGHAGA GUAGA GUAGHAGA GUAGA GUAGA	1844 1853 1904	Db 1724 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT Qy 1733 CCTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGC	Db 1604 CACCCTGTGCGAGACTCTGCTACCTCAGAGGAGAGAGAGA	Db 1484 AGAACCAGACCTGGAGGACCAAAGAGCCAAAAGCCGAAGACCTCAGGCCAAAGCC 1543 Oy 1493 CAAATGAACCTGTCCCTGCTGCTCTCAGAGGGTGAAAAGCGAGACGCCCCTCAGTC 1552	QY 1373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCTGGACTATGAGAAGAAGAATTA 1432 QY 1373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA 1432 Db 1424 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCTGTGAGAAGAAGAATTA 1483 Db 1424 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCTGAGACAAGATTA 1483 QY 1433 AGAACCAGACTGGAGCATCAGGGCCAAACTCCAAGCTGCTGCTAGCACACTCGAGAAGAC 1492	1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTACA	Oy 1133 ACTITATICCCCGAGTCTCATTICCTGCGTGTGAATGACAGCTTTTGTGAGAAAA 1192

` &	d dy	B 8	Db QQ	B 8	Db Qy	D Q	B 8	B 8	B 8	B 8	B 8	Qy Db	g VQ	Qу Db	문 &	B &	B 8	Дb
3293 CTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC 3352	3233 CCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGATAATTTTTTTT	3173 ATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGGT	3113 TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT 3172	3053 TGACAGCCGAGGACACGAGCATCACTCTGCTGGACGGACCATTAGGGGCCTTGCCAAGG 3112	2993 TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC 3052 	2933 TAGCGCTGAGACTGAGCCAGCTTGGGGGTTAGGTAGATCCCTGTTAGGGACAGAGCC 2992	2873 GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT 2932 	2813 TIGTICITAAAAAAGCAAGTGICTTIGGTGITGGAGGACAAAATCCCCTACCATTTICAC 2872 	2753 GATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTC 2812 	2693 CTCTTAACATCIGCATTIGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCA 2752 	2633 TATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT 2692 	2573 TITTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	2513 TGGAAATCATTGAGGTCTCCTGAGAAGAAAGACACTTGTGACTTCTATAGACAATTTTTT 2572 	2453 AGAACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGT	2393 TIGAAAAGCAGTITAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAG 2452 	2333 GGCGGCAGAAGCCAAGTGACAGAGCTGACTCGCGGGCGGAGCTGGCATGAAGAGAGCCCCT 2392	2273 ACTCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA 2332	64 TIGCCA
-			<u>-</u> -			_				<u>-</u>				·		<u></u>		
g Qy	Db Qy	B 8	dd VQ	B 5	db Qy	g 8	₽ &	B 8	ъ Q	B 8	<u> </u>	B 8	Db Qy	g q	, B &) p Q	, B &	D _b
4373 GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG 4432	4313 CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT	253 303	193 243	133 183	123	063	953 003	3893 ACGCTGGCCGGCGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGAGCAAAGGGG 	3833 CCATTGAGTTTTGATCAGTTGTGAATAGAGTGCAAAGCCATGGCCAAGCTGTTTTTGGAA 	3773 GAGAGAGGCTTTAGTGAGGAAGGAATATTCAGAATAAAACGGTTGAGAAAGCTGAGAAGA	3713 CATGCGATGGGGCTGATGTTTCTATGATTGCCTCAGACTTTCACATTTACTAGTAGGGCT	3653 GGTACAAATTGCTGAGGAGAAGCAGGAAACCTGTTTCCTTAGTGGCTTTTATCCCCTCGG 	3593 AATATGGCAGAATTTTATAGGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAAA 	3533 CAAAGCAGATGTTTTTGCCCTTTCTGCTTCACTGCATGGATACAGTTGGTAAAATGTAAT 	3473 AAGCCAAATGTGAATTTATTGGGTTGGTAGCAGCAGCAGCAGCACCACCAAATTCTCAGC	3413 ARTCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA		

NAME/KBY: misc_feature Qy LOCATION: 1, 5144, 5145 5144, 5145 OTHER INFORMATION: n = A,T,C or G Db 0-357-930-27145 Db	LENGTH: 5145 Qy TYPE: DNA TYPE: DNA Db DCGANISM: Homo sapiens Db	ATE: 2000-12-13 ID NOS: 62232 SEQ for Windows Vers	OXTE: 2000-06-09 TON NUMBER: 60/219,007 TON NUMBER: 60/219,007 TON NUMBER: 60/255,281 Db	FILING DATE: 2000-03-16 QY APPLICATION NUMBER: 60/207,454 FILING DATE: 2000-05-25 APPLICATION NUMBER: 60/211,314	PILING DATE: 2003-02-16 Qy APPLICATION NUMBER: 60/183,319 FILING DATE: 2000-02-17 APPLICATION NUMBER: 60/189,862	FILE REFERENCE: MRI-007BCN QY CURRENT APPLICATION NUMBER: US/10/357,930 CURRENT FILING DATE: 2003-02-04 DB DRICH TON NUMBER: 09/78-6, 276 DB DRICH TON NUMBER: 09/78-6, 276	ICANT: Monahan, John Qy E OP INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR E OP INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF E OP INVENTION: HUMAN PROSTATE CANCER	Publication No. US20040259086A1 Qy GENERAL INFORMATION: APPLICANT: SCHOOLER ROBERT APPLICANT: Endere Wilson	Qy 27145 45, Application US/10357930 Db	TGGCTGG 4859 Qy	GCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAGGTGGGGGTGG 4852	AGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTG 4792	TAGGGCTTCTCTTGGCCATGGTCCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTAC 4732	TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATT 4672	GTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGC 4612	ATTCTCAAGTTTCACACAGTAGTTTTTGATGTTATGTACACACAC	AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC 4492 Que	
1133 ACTITATCCCCGAGTCTCATITCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA	1073 TGATACAGCAGAATGGGATTGGTTATAATGCCAGCTATACCTGTCCAAAGCCTG 	1013 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC	953 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC	893 ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGGTTGTTTCCCTGGCCTCTGTGAAGGAA	833 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC	773 TTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	713 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA	653 CATCCCACATTITGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC 	593 TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA 	533 TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC	473 ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGAGGTTATTG	413 AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGGCTGAGCCTTTGAGC	353 GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC	293 ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA	233 CGCTGGCTGCCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA	173 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG	Query Match Best Local Similarity 99.9%; Pred. No. 0; Matches 4683; Conservative 0; Mismatches 3; Indels	

							- '		•	•	0 ~	0 ~	0 <	σ <	σ <	Б Қ	σ <	8 4
2273 ACTCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA 2332	2213 TIGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGGCAGTGCCAGTT 2272	2153 GGCACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATT 2212	2093 TCGGCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCCTGGCCTGGGCCTTAAGGGCT 2152	2033 TTTTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACCACCACCAGCTTCCTTT 2092	1973 GCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCC 2032	1913 GTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA 1972 	1853 CCAACAAGCTATGCCAGTTCTCCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCA 1912 	1793 GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA 1852 	1733 CCTTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATG 1792 	1673 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAAGCAATAAGCTCAAGCGTT 1732 	1613 GCGTGCCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGG 1672	1553 CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGAGGACAAAGGCCCGTGCATCCCGCCA 1612	1493 CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGACGCCCCTCAGTC 1552	1433 AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCTGCACCTGGAGAAGC 1492 	1373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA 1432 	1313 TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA 1312	1193 TITTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGAT 1252
γ	рь О	Db	Db Qy	D Q	B &	Db dd	dg VQ	Db Qy	Ωy	Ωy	ο dα γο	D Q	B 8	g Q	ρb	y da	φ	рь
3353 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC	293 343		A-B		3053 TGACAGCCGAGGGACACGAGCATCACTCTGCTGGACGACCATTAGGGGCCTTGCCAAGG 			2873 GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT	н—н		693 C		2573 TTTTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT			ω 44 0	2333 GGCGCAGAAGCCAAGTGACAGAGGCTGACTCGCGGGGAGCTGGCATGAAGAGAGCCCCT 	24

Ş

₽ &

음 성 음

8 & 8

B 8 B 8

B 6 B

১ ৪ ১

유정

Query Match Best Local Simi Matches 4683;	4433 AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTTAGATATACATTGAAATCTTTAATCAGAC 4492
ល	4373 GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG 4432
TYPE: DNA ORGANISM: HOR FEATURE: NAME / KEY: mis	4313 CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT 4372
NUMBER OF SEQ SOFTWARE: Fast SEQ ID NO 27149	4253 ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA 4312
PRIOR APPLICATE PRIOR FILING IN PRIOR APPLICATE PRIOR APPLICATE PRIOR FILING IN PRIOR FILING FILING IN PRIOR FILING IN PRIOR FILING IN PRIOR FILING IN PRIOR FILING IN PRIOR FILING IN PRIOR FILING IN PRIOR FILING IN PRIOR F	4193 CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG 4252
PRIOR APPLICATE PRIOR APPLICATE PRIOR APPLICATE PRIOR APPLICATE PRIOR PILING F	4133 GTGGGGCTGGGCGGGTGTTGTCATTGTTCTTTCCCTTTCCTGTAAGTGTCGCTAGTTGCTG 4192
PRIOR APPLICATION FILING I PRIOR APPLICATION APPLICATION APPLICATION FILING I	4073 TATCAGCTACAATGTGGGTCCTCTTTTGAAGCCTTAATTCACAACAGCAGCTTTTTGGGG 4132
CURRENT APPLICATION OF THE PRIOR APPLICATION OF THE PRIOR APPLICATION OF THE PRIOR	4013 AGGTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTT 4072
TITLE OF INVEN	3953 CGTCCTCAGTCCTCAACCTACAATCACTGTATGGAATCGGTCCTGGCAGCTGAACATAGG 4012
GENERAL INFORMATION SCHOOL SCH	3893 ACGCTGGCCGGCGTGTCTTCAGTGGAAAAGCAAATCAAAATGGAGCGAGAGCAAAGGGG 3952
RESULT 13 US-10-357-930-271 ; Sequence 27149; . Bublication No.	3833 CCATTGAGTTTTGATCAGTTGTGAATAGAGTGCCAAAGCCATGGCCAAGCTGTTTTTTGGAA 3892
Db 4903 TGC	3773 GAGAGAGGCTTTAGTGAGGAACGAATATTCAGAATAAAACGGTTGAGAAAGCTGAGAAGA 3832
4843	3713 CATGCGATGGGGCTGATGTTTCTATGATTGCCTCAGACTTTCACATTTACTAGTAGGGCT 3772
783	3653 GGTACAAATTGCTGAGGAGAAGCAGGAAACCTGTTTCCTTAGTGGCTTTTATCCCCTCGG 3712
4 4	3593 ANTATGGCAGAATTTTATAGGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAAA 3652
	3533 CAAAGCAGATGTTTTTGCCCTTTCTGCTTCACTGCATGGATACAGTTGGTAAAATGTAAT 3592
4603	3473 AAGCCAAATGTGAATTTATTTGGGTTGGTAGCAGAGCAG
4543	3413 AATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA
Ov 4493 ATT	3403 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC

S

유 & 밁 Ş 밁 ર્શ В ঠ 멍

ક

υ •

Indels

1;

Gaps

1;

8 8 8 8

유

밁 ঠ 뭐 ₹ 문 श्च 뭐 5 뭥 S 밁 ঠ 밁 ક 밁 5 밁 송 유

```
FISCALIGN:
FISCALIGN:
FISCALIGN:
FISCALIGN:
FISCALIGN:
FISCALIGN:
FISCALIGN:
FISCALIGN:
FISCALIGN:
FISCALIGN:
FISCALIGN:
FOR
INVENTION:
FUDANIFICATION, ASSESSMENT, PREVENTION, AND THEI
INVENTION:
FUDANIFICATION, ASSESSMENT, PREVENTION, AND THEI
INVENTION:
FUDANIFICATION, AND THEI
INVENTION NUMBER:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILING DATE:
FILIN
                                                                                                                         misc feature
1, 5144, 5145
RMATION: n = A,T,C o
27149
                                                                                                                                                                                                                                                                                                                                                                                 NG DATE: 2000-07-18
CCATION NUMBER: 60/255,281
NG DATE: 2000-12-13
SEQ ID NOS: 6232
TastSEQ for Windows Version 4.0
81.0%;
milarity 99.9%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7149
9, Application US/10357930
5. US20040259086A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGGCTTCTCTTGGCCATGGTCCCCTTCCTTCTGGAACTGTGAIGTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   omo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTGG 4859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAGGTGGGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTGG 4909
; Score 4413; Di
; Pred. No. 0;
0; Mismatches
                                                                                                                                                                유
                                                                                                                                                                Q
                                                              DB 18;
                                                              Length 5145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FOR
THERAPY OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4552
```

8 8 8 8

8 B 8

	0 \ 0 \
ATCANATISTACGGACTECTTTGTGGACGGATTCCTTTTCCAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACAAGAGCACATCAAGAGCACACATCAAGAGCACAAAGAGCACATCAAGAGCACAAAGAGCACATCAAGAGCACAAAGAGCACATCAAGAGCACAAAGAGCACAAGAGCACAACAGAGACAAAAGAGCACATCAAGAGCACAAAGAGCACATCAAGAGCACAAAGAGCACAACAAGAGCACAACAAGAGCACAACA	3 GCTTTCAGTCO
	
0	
x	Q
	.304

8 8 8 8 8

Ş	B 8	B 8	B &	B &	B &	B 8	B 8	B &	B 8	B &	g Q	₽ Q	B 8	B 8	B 8	B &	B & B	
3413 AATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA	3353 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC	3293 CTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC 3352	3233 CCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGATAATTTTTTTT	3173 ATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGGT	3113 TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT 3172	3053 TGACAGCCGAGGGACACGAGCATCACTCTGCTGGACGGAC	2993 TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAAACCCACGCTCACC 3052	2933 TAGCGCTGAGACTGAGCCAGCTTGGGGGTCAGGTAGGTAG	2873 GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT 2932	2813 TIGITCITAAAAAAGCAAGTGTCTTTGGTGTTTGGAGGACAAAATCCCCTACCATTTTCAC 2872	2753 GATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTC 2812	2693 CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCA 2752	2633 TATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT 2692	2573 TTTTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	2513 TGGAAATCATTGAGGTCTCCTGAGAAGAAAAAAGACACTTGTGACTTCTATAGACAATTTTTT 2572 	2453 AGAACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGGTCTAGCTTTTCGGGCAGCA 2512	2384 GGCGGCAGAAGCCAAGTGAACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCT 2443 2393 TTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGAAGAGAGACCATCATGTCAG 2452	
Оу	D 5	S B 4	5 B 5	, B &	B &) B &	p Q	dg Çy	8 8	P &	B &	B 5	;	S & &	;	S B 2	?	_ 구
4493 ATTCTCAAGTTTCACACAGTAGTTTTTGATGTTACGACACACAC	ANAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC 4	CIAITGA SCUE STANDARD COMPANSULT TO CONCRETE A TOTAL AT TOTAL CONCRETE A TOTAL AT TOTAL CONCRETE A TOTAL C	4313 CCGACTTGGTTATGGGGATGATGAGCCGCACAGACTCCACTAGTTGTGCACAAATAATGT 4372 4313 CCGACTTGGTTATGGGGATGATGAGCCGCACAGACTCACTAGTTGTGCACAAATAATGT 4472 4363 CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT 4422	4253 ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGGCACAGAATGATTGACTCAACACAGA	113 CC CGTATCT CAGGITTITIC TOTAL TITLE CAGGATGIGACAGITTITITIGACCAGGATGIGACAGITTITITIGACCAGGATGIGACAGITTITITIGACAAATGGACAGTTTTTTGACCAGGATGIGACAGTTTTTTGACCAGGATGIGACAGTTTTTTGACCAGGATGIGACAGTTTTTTGACCAGGATGIGACAGTTTTTTGACCAGGATGIGACAGTTTTTTGACCAGGATGIGACAGTTTTTTGACCAGGATGIGACAGTTTTTTGACCAGGATGIGACAGTTTTTTGACCAGGATGIGACAGTTTTTTTGACCAGGATGIGACAGTTTTTTTTTT	4133 GTGGGGGGGGGTGTTGTCATTGTTCTTTCCCTTTCCTGTAAGTGTGGCTAGTTGCTG	4073 TAYCAGCTACAAYETGGGTCCTCTTTGAAGCCTTAATTCACAACAGCAGCTTTTTGGGG 	40.3 AGGTCACTGGAACAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTT	3953 CGTCCTCAGTCCTCAACCTACAATCACTGTATGGAATCGGTCCTGGCAGCTGAACATAGG	3893 ACGCTGGCCGGCGTGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGGAAAGGGG	3833 CCATTGAGTTTTGATCAGTTGTGAATAGAGTGCAAAGCCATGGCCAAGCTGTTTTTGGAA 389	3/3 GACAGAGGCTTTAGTGAGGAAGGAATATTCAGAATAAAACGGTTGAGAAAGCTGAGAAGA	373 CANGCOMICOGOCIANIGIIICIAIGAIIICECCICAGACIIICECAIIIRCIAGIACGACACACACACACACACACACACACACACACAC	303 GUIACANATIGCISWAGAMACCAGAMACCTGTITCIIAGIGGCTTTTATCCCCTCGG 3703 GGTACAAATTGCTGAGGAGAAGCAGGAAACCTGTTTCCTTAGTGGCTTTTATCCCCTCGG 3703 GGTACAAATTGCTGAGGAGAAGCAGGAAACCTGTTTCCTTAGTGGCTTTTATCCCCTCGG	3653 ARTATOGCOGARIII MATAGAAAAA TICINGGGGGGGGAAAATTATGGGAAGATTAAGAAA 3643 AATATGGCAGAATTTTATAGGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAAA 3653 AGTAGAAAATTTATAGGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAAA	3583 CANAGCAGA TETTTTGCCCTTCTGCTTCACTGCATGCATACAGTTGGTAAAATGTAAT 364	3463 ARTCAARGAATTGTTTAAAATGGGATTGTCAATCCTTTTAAATAAAGATGAACTTGGTTTC 3473 AAGCCAAATGTGAATTTTATTTTGGGTTGGTAGCAGAGCAGCAGCACCTTCAAATTCTCAGC	ייני איני איני איני איני איני איני איני

ngctgttggagcgcgggagcaaaggtaaagaatgat 	Query Match 81.0%; Score 4413; DB 18; Length 5145; Best Local Similarity 99.9%; Pred. No. 0; Matches 4683; Conservative 0; Mismatches 3; Indels 1; Gaps 1;	; NAME/KRY: misc feature ; LOCATION: 1, 5144, 5145 ; OTHER INFORMATION: n = A,T,C or G US-10-357-930-28675		SOFTWI SOFTWI	PRIC	PRIOR FILLING DATE: 2000-05-16 PRIOR PELLING DATE: 2000-05-25 PRIOR PELLING DATE: 2000-05-25 PRIOR APPLICATION NUMBER: 60/211,314		CURRENT A CURRENT F PRIOR APE	HIPLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF TITLE OF INVENTION: HUMAN PROSTATE CANCER	GENERAL INFORMATION: APPLICANT: Schlegel. APPLICANT: Endege, V	±1 €	Oy 4853 TGGCTGG 4859 Db 4903 TGGCTGG 4909	4793 GCGAAGGC 4843 GCGAAGGC	4733 4783	4723	4663	4553 4603
Db Qy	Qy Db	Qy Db	94 94	B 8	B 성	D 99	gy Qy	dg Qy	Qу	D Qy	D Q	ob Oy	g Q	Db Qy	Qy Db	Qy	Qу
1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA 1312	1193 TITTGCCGTGGITGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGAT 1252 	1133 ACTITATCCCCGAGICTCATITCCIGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA 1192 	1073 TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG 1132	1013 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC 1072	953 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1012	893 ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAA 952 	833 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGGCTTCAACTCTGTTC 892	773 TTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCCAAGATGTTGCCTCTCTCT	713 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA 772 	653 CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC 712 	593 TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA 652 	533 TIGTCAIGGCCCATGAGATGATIGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC 592	473 ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGGCTTATTG 532 	413 AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC 472	353 GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC 412	293 ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA 352 	233 CGCTGGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA 292

& B & B &	8	১ ৯ ১	ОУ	B 8	B &	B &	g Q	g Q	B &	8 8	B &	D 49	B &	B 8	B 8
ω 4 ω ω	2204 GGCACTCG 2213 TTGCCACAC	2093 TCGGCCTT 2144 TCGGCCTTT 2153 GGCACTCG	2033 TTTTATCT	1973 GCCAGAGC 2024 GCCAGAGC	1913 GTCCTGAT. 1964 GTCCTGAT.	1853 CCAACAAG 1904 CCAACAAG	1793 GCTTCTCC 1844 GCTTCTCC	1733 CCTTCTCT 1784 CCTTCTCT	1673 CGCTCAGT	1613 GCGTGCCC 1664 GCGTGCCC	1553 CACCCTGT	1493 CAAATGAA 1544 CAAATGAA	1433 AGAACCAG 1484 AGAACCAG	1373 CTACTATA 1424 CTACTATA	1313 TCATGAAG 1364 TCATGAAG
TACAGCTGCAGCCZ 	SATATCTTGCCCC SAGTCCTCACACTT	CCACCAGCCAGC	CCACTGCATCGAAC CACTGCATCGAAC	NAGCGATTGCATTO NAGCGATTGCATTO	vaggaggaagccac vaggaggaagccac	CTATGCCAGTTCTC	rcatcagaagatgo catcagaagatgo	CTGGATATCAAAT(CTGGATATCAAAT(GGCTGCACCTGTO	AGCGTGCCCAGCGT	GCCGACTCTGCTAC	ccierccciecies 	ACTGGAGCATCAGO ACTGGAGCATCAGO	TCTCCAAACTTCAJ CTCCAAACTTCAJ	AGGATGGACATGTO AGGATGGACATGTO
GCTGCCACTTGC GCTGCCACTTGC GCTGCCACTTGC GAGCTGACTCGCGG AGCTGACTCGCGG AGCTGACTCGCGG	CTACTCTGCCTCA	GCACCTCACGAAG	TGGGAGCGTGGAG TGGGAGCGTGGAG	GGTCAGAACCAGC	CATCCCCAAGAAG 	CCCTGTTCAGGAA	TTTGGAATACTAC TTTGGAATACTAC	AGTTTCATATTCA AGTTTCATATTCA	CGCAGACAGGCTG	GCAGCCGTCGCTG	CTCAGAGGCAGCA	CTCAGAGGGTGGA	GCCAAAGAGCAAA GCCAAAGAGCAAA	TTTTCTGGGCCAA	TTTAGATGAAGCT TTTAGATGAAGCT
ACTCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAACTCTTGCGGAGACCAAGTCTATTCTGTGCGCAACTCTGCCGCAGTCTATTCTGTGCGCAACTCTGCCGCAGTCTACAGCTGCCAGCTGCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAAGCCGCACTTGCCGAAGCAGAGCCCCTTGCGCAGCAGAGCTGAAGAGAGAG	GGCACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTGACCAGCAGCTGGTATT TTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCCAGTGCCAGTT	TCGGCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCT	TTTTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTT	GCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCC	GTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA	CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCA	GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA	CCTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGC	CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT	GCGTGCCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGG	CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGC	CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGACGCCCCTCAGTC	agactggagcatcagggccaaagagcaaactcaagctgctgcacctggagaag 	CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTA 	TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA
											S = S		()—()		α — α
2332 2383 2392 2392 2443	2263 2272 2323	2152 2203 2212	2092 2143	2032 2083	1972 2023	1912 1963	1852 1903	1792 1843	1732 1783	1672 1723	1612 1663	1552 1603	1492 1543	1432 1483	1372 1423
8 8 8 8 8	D Q	} & B :	§ § §	Ωγ	Db	₽ &	2 B 8	D	ν dα γ	, DD QY	p	B &	\$ \$ \$? B &	§ B
ய ய ய ய	3 2 9 3 3 3 4 3	ப ப ப	3113 3163	3053	3043	2983				2693 2743	2633 2683	2623	2564		
ய ய ய ய	3 2 9 3 3 3 4 3	ப ப ப	3113 3163	3053	3043	2983				2693 2743	2633 2683	2623	2564		
ய ய ய ய	3 2 9 3 3 3 4 3	ப ப ப	3113 3163	3053	3043	2983				2693 2743	2633 2683	2623	2564		
ய ய ய ய	3 2 9 3 3 3 4 3	ப ப ப	3113 3163	3053	3043	2983				2693 2743	2633 2683	2623	2564		
ט ט ט ט ט	3 2 9 3 3 3 4 3	ப ப ப	. .	3053	3043	2983	2873 2923			2693 2743	2633 2683	2623	2564	2502	

3933 CCATTGAGTTTTTCATATACAGTTCGAAAAGCAAATCCATGGCCAAGCCTTTTTTGGAA 3992 3983 CCATTGAGTTTTGATCAGTTGTGAATAGAGTCCAAAGCCATGGCCAAGCCTTTTTTGGAA 3992 3983 CCATTGAGTTTTGATCAGTTGTGAATAGAGTCCAAAACCCATGGCCCAAGCCTTTTTTTGGAA 3942 3994 ACGCTGGCCGGCGTGTCTTCAGTTGGAATAAACCAAATCCAAAATCCAAAATCGAAGCCAAGCCATTTTTTTGGAA 3942 3943 ACGCTGGCCGACCTGCCTCAACCTACAATCCACTGTATGGAATCCAAATCGAACCCAAGCCAAAAGCGAAAAGCGAAAAAACCAAAATCGAAATCGAAATCGAACCCACAACACCACAAATTGGCTTTTTTGGAGCCAAAAAAACCAAATCGAATCGAACCAACAACAACAACAACAACAAGTGAACAAAGCCAAATCGAATTGGCTTTTTTGAAACATCCTCCTGGCCTGAACCAACTAGGGG 4002 3953 CCGTCCACCTCCAACCTACAATCACTGTATTGCAAAACACCACCACCTTTTTTGGGG 4002 4003 CCGTCCACCTCCAACCTACAATCGCACTTTTTTGAACCATCCTCCTGGCTTGAACTTTTTTGGGG 4102 4003 ACGCTCCACACTCCACATTGGCTCTTTTTGAACCATCCTCCTGTAACCACCACCTTTTTTGGGG 4102 4003 ACGCTCCACATCGTGGGGTCCTCTTTTTGAACCATCTTTTTTGACCAAACAACAACAACAACTTTTTTTGGGG 4102 4003 ACGCTCCACATCGTGTGTTTTCCTCTTTTTGAACCATCTTTTTTTT	
RESULT 15 Sequence 115, Application 105/10648593 Publication No. M230040106112A1 GENERAL IMPORMATION: INTERNITIONATION OF GENERAL PROTEIN TROGINE KINASES AND/OR TITLE OF INVENTION: INTERNITIONAL PROTEIN TROGINE KINASES AND/OR TITLE OF INVENTION: INTERNITIONAL PROTEIN TROGINE KINASE PATHWAYS IN BREAST CELLS TITLE OF INVENTION: INTERNITIONAL PROTEIN TROGINE KINASE PATHWAYS IN BREAST CELLS TITLE OF INVENTION: INTERNITIONAL PROTEIN TROGINE KINASE PATHWAYS IN BREAST CELLS TITLE OF INVENTION: INTERNITIONAL PROTEIN TROGINE KINASE PATHWAYS IN BREAST CELLS TITLE OF INVENTION: PROTEIN TROGINE KINASE PATHWAYS IN BREAST CELLS TITLE OF INVENTION: PROTEIN TROGINE KINASE PATHWAYS IN BREAST CELLS TITLE OF INVENTION: PROTEIN TROGINE KINASE PATHWAYS IN BREAST CELLS TITLE OF INVENTION: PROTEIN TROGINE KINASE PATHWAYS IN BREAST CELLS TITLE OF INVENTION: PROTEIN TROGINE KINASE PATHWAYS IN BREAST CELLS TITLE OF INVENTION: PROTEIN TROGINE KINASE PATHWAYS IN BREAST CELLS TITLE OF INVENTION: PROTEIN TROGINE KINASE PATHWAYS IN BREAST CELLS TITLE OF INVENTION: PROTEIN TROGINE KINASE PATHWAYS IN BREAST CELLS TITLE OF INVENTION: PROTEIN TROGINE KINASE PATHWAYS IN BREAST CELLS TITLE OF INVENTION: PROTEIN TROGINE KINASE PATHWAYS IN BREAST CELLS TITLE OF INVENTION: PROTEIN TROGINE KINASE PATHWAYS IN BREAST CELLS TITLE OF INVENTION: PROTEIN TROGINE KINASE PATHWAYS IN BREAST CELLS TITLE OF INVENTION: PROTEIN TROGINE KINASE PATHWAYS IN BREAST CELLS TITLE OF INVENTION: PROTEIN TROGINE AND TROG	Qy 4613 TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATT [

유

음 성 음 성

유성

밁

성 음 성

음 성 음

S

음 성 뮹 8 음 성 성 유

Ş В Ś 멍 8 음 성

밁 Ś 밁 Ś 밁

밁

୪ ନି ୪	B 8	B 8	B &	용 성	용 성	B &	용 성	<u> </u>	용 <i>원</i>	용 성	B &	DB QY	당 왕	<u> </u>	유 왕	B 3	Db
1735 TTCTCTCTGGATATCAARTCAGTTTCAGATAGTCAGCARGGAACATCCTTACATGGC 1794	μ σ.	1615 GTGCCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCG 1674	CCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGCAGCAAAGGCCCGTGCATCCCGCCAGC	1495 AATGAACCTGTCCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCA 1554 	1435 ARCCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCA 1494 	1375 ACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATAAG 1434 	1315 ATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	1255 GTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATC 1314	1195 TTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCCAAAAGCCTCCAATGGATGT 1254 	1135 TITATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAAATT 1194 	1075 ATACAGCAGAATGGGATTGGTTATAATGCCAGCTATACCTGTCCAAAGCCTGAC 1134	1015 ACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTG 1074	955 TCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCA 1014	CTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAA	TCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCAC	775 GATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	
									-								
ob Oy	8 B 7	8 B 8	B &	g d	, B &	Db Qq	9	B &	, B &	db Qy	, B &	9	. B &	B 8	A 4	B 8	Db
		2695 CTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCAGA 2754 	635 TTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACTCT	2575 TICTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	515 GAAATCATTGAGGTCTCCTGAGAAGAAAGACACTTGTGACCTTCTATAGACAATTTTTTTT	455 AACAGGTCACGGGAAGAGCTGGGGAAAATTGGGGCAGTCAGCTTTTCCGGGCAGCATG 	395 GAAAAGCAGTTIAAACGCAGAAGCTGCCAAATGGAATITGGAGAGCATCATGTCAGAG 	GGCAGAAGCCAAGTGACAGAGCTGACTGCGGGGGGAGCTGGCATGAAGAGAGCCCCTTT GGCAGAAGCCAAGTGACAGAGCTGACTGCGGGGGGAGCTGGCATGAAGAAGAGCCCCTTT CGGCAGAAGCCAAGTGACAGAGCTGACTGGCGGAGCTGGCATGAAGAAGAGCCCCCTTT	275 TCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGG	215 GCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATTACGGAGGCAGTGCCAGTTAC	CACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTT	GGCCTTTCCACCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGG 	TRATCTCCACTGCATGAAGTGGGAGGGGGGGGGGGGACAATTACCACCAGCTTCCTTTTC	CAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTT	1915 CCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGC 1974		TTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACC 1

3955 TCCTCAGTCCTCAACCTACAATCACTGTATGGAATCGGTCCTGGCAGCTGAACATAGGAG 4014 	3895 GCTGGCCGGCGTGTCTTCAGTGGAAAAGCAAATCAAAATGGAGCGAGAGCAAAGGGGCG 3954 	3835 ATTGAGTITTGATCAGTIGTGAATAGAGTGCAAAGCCATGGCCAAGCTGTTTTTTGGAAAC 3894 	3775 GAGAGGCTTTAGTGAGGAAGGAATATTCAGAATAAACGGTTGAGAAGACTGAGAAGACC 3834 	3715 TGCGATGGGGCTGATGTTTCTATGATTGCCTCAGACTTTCACATTTACTAGTAGGGCTGA 3774	3655 TACAAATTGCTGAGGAGAAGCAGGAAACCTGTTTCCTTAGTGGCTTTTATCCCCTCGGCA 3714	3595 TATGGCAGAATTTTATAGGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAAAGG 3654 	3535 AAGCAGATGTTTTTGCCCTTTCTGCTTCACTGCATGGATACAGTTGGTAAAATGTAATAA 3594 	3475 GCCAAATGTGAATTTATTTGGGTTGGTAGCAGAGCAGCAGCACCTTCAAATTCTCAGCCA 3534 	3415 TCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA	3355 GCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC	3295 TCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACGAGGAACCTG 3354 		3175 CTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGGTAG		3055 ACAGCCGAGGGACACCAGCATCACTCTGCTGGACGGACCATTAGGGGCCTTGCCAAGGTC 3114	ω ω	2935 GCGCTGAGACTGAGCCAGCTTGGGGGTCAGGTAGGTAGACCCTGTTAGGGACAGAGCCTA 2994
Q B Q	ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο	Db Qy	Оу	D Q	Db Qy	ДУ	B Q	B &	g &	D Qy	\$ Q	g Q	Qy db	Qy dd	₽ Q	D Qy	Qy db
5035 AGTHAGGCCAGCTGTTGAACTGTGCATTTCTCATTTTGATGTGTCATGTATG 5094	5 CATGTG	GGTGAT	s gerege	4795 GAAGGGGTGGCCTCGGAGGCAGGCTGGGAGCTGCTTGGATGTCTTTAGGTGGGGTGGTG 4854 	0 5	4675 GGGCTTCTCTTGGCCATGGTCCCCTTCCTGGAACTGTGATGTTAGTCACATCCTACAG 4734 	4615 CTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATTTA 4674	4555 TCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTC 4614 	4495 TCTCAAGTTTCACACAGTAGTTTTTGATGTTATGTACACACAC	4435 AGTGCTGGTCAACGAITIGAGTTAGTTTTTAGATATACAITGAAATCTTTAATCAGACAT 4494 	4375 TATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAA 4434 4020 TATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAA 4079	4315 GACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGTGC 4374 	4255 TICATGTITCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGACC 4314 	4195 TCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTGAC 4254 	4135 GGGGCTGGGCGGGTGTTGTTCATTGTTCTTTCCCTTGTAAGTGTCGCTAGTTGCTGCC 4194	4075 TCAGCTACAATGTGGGTCCTCTTTTGAAGCCTTAATTCACAACAGCAGCTTTTTTGGGGGT 4134 	4015 GTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTTTA 4074

8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

B & B & B &

252 TCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGAATCAAATGTGAGGGGCTGC 	Db 132 CGTTTCCCTCTGAGGGAATTGGGAGGTCGGCCCCAAAAGCTTTCAGTCCAGTGTAAA 191 Oy 192 GCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGAATGAAT	132 CGTTTCCCTCTGAGGGAATTGGGAGGTCGGCGGCCCCAAAAGCTTTCAGTCCAGTGTAAA	Oy 72 GCGGCGCTCGCAAGTCCGGGAAGGCGAAGGGGGAGACGCCGTGACAACTTT 131	12 GAGGAGGAGAGCGACGGGACGGGACGCGAGCGGAGCGG	3 B O '	misc ORMATI	17 3766 A	וֹילקׁלִ	PRIOR APPLICATION NUMBER: US 60/226,728 PRIOR FILING DATE: 2000-08-18 PRIOR APPLICATION NUMBER: US 60/229,254 PRIOR APPLICATION NUMBER: US 60/229,254	PRIOR APPLICATION NUMBER: US 60/223,272 PRIOR FILING DATE: 2000-08-03 PRIOR APPLICATION NUMBER: US 60/224,309 BRIOR APPLICATION NUMBER: US 60/224,309	PRIOR APPLICATION NUMBER: PCT/US01/23716 PRIOR FILING DATE: 2001-07-26 PRIOR FILING DATE: 2006-07-28 PRIOR FILING DATE: 2006-07-28	; TITLE OF INVENTION: PROTEIN PHOSPHATASES ; FILE REFERENCE: PI-0173 PCT ; CURRENT PILINGTON NUMBER: US/10/343,357 ; CURRENT FILING DATE: 2003-01-28	REN, BAUGHN, Mariah R. REN, Bridget A. Bridget A. B.; CHAWLA, Narinder K.	WANG, Yumei E.; GANDHI, Ameena LEE, Ernestine LII Dynng Aina	GENERAL INFORMATION: APPLICANT: INCYTE GENOMICS, INC.; TANG, Y.Tom APPLICANT: ELLIOTT, Vicki S.; RAMKUMAR, Jayalaxmi APPLICANT: YAO MONTONE G.: RIPERDED No.11	RESULT 16 US-10-343-357-17 ; Sequence 17, Application US/10343357 ; Diblication No. US2004058341A1	Db 4740 TTAATGTATGAAATGAATAAAATGAAAACTGGTACCTGTTTATACAT 4790
Oy 1332 GT Db 1332 GT OY 1392 CA		Qy 1212 AT			Ωy 1032 TC	Qy 972 CI Db 972 CI	Qy 912 TO	Qy 852 TC	Qy 792 TC	Qy 732 TI Db 732 TI	Qy 672 CI Db 672 CI	Qy 612 AC	Qy 552 GI Db 552 GI	Qy 492 G1 Db 492 G1	Qy 432 TC	Qy 372 GC Db 372 GC	Qy 312 T7
GTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAAAAAGACCTACTATATCTCCAAACTT 1391		ATCAGTAGATTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTT 1271	TTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTGCCGTGGTTGGACAA 1211		TCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAGCAGAATGGGAT 1091 	CTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCGAATTCTTCCCAA 1031	TGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCACTCTAGTCCCTAC 971	TGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCAGGTGGGTT 911 	TGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	TACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGATTG	CATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAAT 731	AGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCCCACATTTTGGAAGC 671	GATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAAAGTGGAACCGAAAA 611 	GTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTGTTGTCATGGCCCATGAGAT 551	TCATACACTTTTAGTACAATGGAGTGGGTGAGCCTTTGAGCACCACCACCATTACATCATC 491	GGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCCAGTCACCACCAGCCTGACC 431	TTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAAGAGAAAGAGAAAGACATTCACTT 371

\$	문 &	B 8	B 8	Db Qy	문왕	g Q	문왕	B &	B 8	B 8	B 8	당 왕	B &	유 왕	B 8	B &	B 8	ф
2472 GCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAAATCATTGAGGTCTC 2531	2412 CAGAAGCTGCCAAATGGAATTTGGAGAGAGACATCATGTCAGAGAACAGGTCACGGGAAGA 2471	2352 CAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAAAAGCAGTTTAAACG 2411	2292 CCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGGCAGAAGCCAAGTGA 2351	2232 CTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCTGCCTACAGCTGCAG 2291	2172 CCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCCACAGAGTCCTCACA 2231	2112 GCAGCACCTCACGAAGTCTGCTGGCCTTGGGCCTTAAGGGCTGGCACTCGGATATCTTGGC 2171	2052 AAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGCCTTTCCACCAGCCA 2111	1992 TICGGICAGAACCAGCAGCAGTGGCACCGCCCAGAGGICCCTITIATCICCACTGCATCG 2051	1932 CAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAGAGCCAGGCGATTGCA 1991 	1872 CTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCTGATAAGGAGGAAGC 1931 	1812 TGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAACAAGCTATGCCAGTT 1871 	1752 ATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTCTCCTCATCAGAAGA 1811 	1692 GTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGFTCCTTCTCTCTCTGGATATCAA 1751 	1632 CGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCT 1691	1572 TACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTGCCCAGCGTGCCCAG 1631	1512 TGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCCTGTGCCGACTCTGC 1571	1452 AGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAAGCCAAATGAACCTGTCCCTGC 1511	
													·					
р Q	QQ da	dd dy	η ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο	Db Qy	QY dd	ο О	р	Db	Db Qq	Db Qy	dg dg	g dd	D da	QY dd	ρb	Db Qy	р х	S B
3552 CTTTCTGCTTCACTGCATGGATACAGTTGGTAAAATGTAATAATATGGCAGAATTTTATA 3611	3492 TTGGGTTGGTAGCAGAGCAGCAGCACCTTCAAATTCTCAGCCAAAGCAGATGTTTTTGCC 3551	3432 ATGGGATTGTCAATCCTTTAAATAAAGATGAACTTGGTTTCAAGCCAAATGTGAATTTAT 3491 	372 371	312	252	192 191	3132 AGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCATATCTGGTAGCCCATTTTCT 3191	072	3012 AATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACCTGACAGCCGAGGGACACGA 3071 	2952 GCTTGGGGGTCAGGTAGGTAGACCCTGTTAGGGACAGAGCCTAGTGGTAAATCCAAGAGA 3011	2892 TCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCTTAGCGCTGAGACTGAGCCA 2951		2772 GACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTCTTGTTCTTAAAAAAGCAAG 2831 					GCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAAATCATTGAGGTCTC

QY 432 TCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGCACACCACCATTACATCATC 491	Qy 372 GAAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTTGCCAGTCACCAGCCAG	Qy 312 TTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAAGAAA	Qy 252 TCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGAATCAAATGTGAGGGGCTGC 311	QY 192 GCTGTTGGAGCCGGGAGCAAAGGTAAAGAATGATGTAATGCGCTGGCTG	QY 132 CGTTTCCCTCTGAGGGAATTGGGAGGTCGGCGGCCCCAAAAGCTTTCAGTCCAGTGTAAA 191	Qy 72 GCGGCGCCTCGCAAGTCCGGGAGGCGAGGGGGGGGGGGG	Qy 12 GAGGAGGAGGGGACGGGACGCGAGCGGAGCGCAGCCGCCCTCTCGGCTCCGCG 71	Query Match Best Local Similarity 99.9%; Pred. No. 0; Matches 3458; Conservative 0; Mismatches 2; Indels 1; Gaps 1;	Homo Bapiens ORMATION: Clone ID: LIB411 -26234	; NUMBER OF SEQ ID NOS: 73128 ; SEQ ID NO 26234 ; LENGIH: 3625 ; TYPE: DNA	TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement; FILE REFERENCE: 38-21(53313)B CURRENT APPLICATION NUMBER: US/10/425,114 CURRENT FILING DATE: 2003-04-28	Screen, Steven E Tabaska, Jack E Cao, Yongwei	GENERAL INFORMATION: APPLICANT: Liu, Jingdong APPLICANT: Zhou, Yihua APPLICANT: Zhou, Yihua	RESULT 17 US-10-425-114-26234 JS-6quence 26234, Application US/10425114 - Publication US/004001488881	Db 3731 TTCTATGATTGCCTCAGACTTTCACATTTACTAGTA 3766	3671 AAGCAGGAAACCTGTTTCCTTAGTGGCTTTTATCCCC	3611 GGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGGAAAAGGTACAAATTGCTGAGGAG	Ov 3612 GGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAAAGGTACAAATTGCTGAGGAG 3671
B &	B 5	}	? B 4	}	B &	b by	D QY	- 4g	Qy Db	d do	B &	B &	B &	B &	B &	B &	B &	ΔQ
1512 TETCTCAGAGGETGGACAGAAAACGACACGCCCTCAGTCCACCCTGTGCCGACTCTGC 1571	22 AUGUSTANACHARCITANACHARCITETISCACCITUSAGANGCCAAAIGAACCTGICCCTGC 1	392 CAAIIIICISSSCCAACIICISSACIAISAAASAASAASAINAIIAMAAACCAASACIISSASSAAIS 	S GIGITAGA GAAGCI ACAGAI I GIGAAAGAAAAAAGACIACIACIA IAIA CICCAAACIT 	72 AGCTIGGANTCICCGCTCCGCCACCATCGCTATCGCCTACATCATGAGAGAGTIGACATT	12 ATCAGTAGATTICATTICAGAAAGCCTCCAATGGATGTGTGTTCTAGTGCACTGTTT 1	52 TTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTGCCGTGGTTGGACAA	92 TGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCA	32 TCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAGCAGCAGGAATGGGAT 	72 CTGCATTICTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCGAACTCTTCCCAA	912 TGCTGAGTTCTCCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCACTCTAGTCCCTAC 971 	852 TGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCAGGTGGGTT 911	792 TGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	732 TACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGATTG	672 CATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAAT 731 	612 AGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCCCACATTTTGGAAGC 671	552 GATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGGAGAGTGGAACGGAAAA 611 	492 GTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTGTTGTCATGGCCCATGAGAT 551 	586 TCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGCACCACCACCATTACATCATC 645

Qy 2592 Db 2745	Qy 2532 Db 2686	Qy 2472 Db 2626	Qy 2412 Db 2566	Oy 2352 Db 2506	Qy 2292 Db 2446	Qy 2232 Db 2386	Qy 2172 Db 2326	Qy 2112 Db 2266	Qy 2052 Db 2206	Qy 1992 Db 2146	Qy 1932 Db 2086	Qy 1872 Db 2026	Qy 1812 Db 1966	Qy 1752 Db 1906	Qy 1692 Db 1846	Qy 1632 Db 1786	Db 1726
ATTCCCTGTAAATCTGAAATATATATATGTACATACATATATAT	CTGAGAAGAAAGACACTTGTGACTTCTATAGACAATTTTTTTT	GCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAAATCATTGAGGTCTC	CAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAACAGGTCACGGGAAGA	CAGAGCTGACTCGCCGGCGAGCTGGCATGAAGAGAGCCCCCTTTGAAAAGCAGTTTAAACG	CCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGGCAGAAGCCAAGTGA	CTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCTGCCTACAGCTGCAG	CCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCCACAGAGTCCTCACA	GCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCACTCGGATATCTTGGC	AAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGCCTTTCCACCAGCCAG	TTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTATCTCCACTGCATTCG	CAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAGAGCAAGCGATTGCA	CTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCTGATAAGGAGGAAGC	TGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAACAAGCTATGCCAGTT	ATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTCTCCTCATCAGAAGA)2 GTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTCTCTCTGGATATCAA 	12 CGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCT	
2651	2591 2744	2531	2471 1 2625	2411	2351	2291	2231	2171 2325	2111	2051	1991	1931	1871	1965	1751	1845	1785
SOFTWARE: FASTSEQ ID I SOFTWARE: FASTSEQ SEQ ID NO 1 LENGTH: 3496	; TITLE OF INVENTION ; FILE REFERENCE: 20 ; CURRENT APPLICATIO ; CURRENT FILING DAY	GENERAL INFORMATION APPLICANT: Luche, APPLICANT: Wei, I	RESULT 18 US-09-964-277-1 ; Sequence 1, Application	Cy 3:32 ALGGA Db 3585 ATGGGA	3525	3465	3405	3345	3285	3225	3165	3105	3045	2985	2925	2865	2805

```
TYPE:
DNA
                                                                                                                                        ication US/09964277
20137170A1
ION:
e, Ralf M.
                                                        BO
ON: DSP-16 DUAL-SPECIFICITY PHOSPHATASE 200125.434
TON NUMBER: US/09/964,277
ATE: 2001-09-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AATTCCCGTGGGCCTAGATGGAGATAATTTTTTTTTTTCTCCCAGCTTTATGAAGA 3311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTCAGACAGGAAAGTCGGGGCTTTGACCACTACCATATCTGGTAGCCCATTTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTGTCAATCCTTTAAATAAAGATGAACTTGGTTTC 3625
                                                                                                                                                                                                                                                                                                                  GTTGGGAGGCTAACGAGTCTACCTCCCTCTTTGTAAATCAAAGAATTGTTTAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                AATTCCCGTGGGCCTAGATGGAGATAATTTTTTTTTTCTTCAGCTTTATGAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGTGAATAGGTAGGTAGCTAGTCACACTTTTCAGACCAATTCAAACTGTCTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCAGACAGGAAAGTCGGGGCTTTGACCACTACCATATCTGGTAGCCCATTTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VTCCTATCCAAAGCTGATTCACAAACCCACGCTCACCTGACAGCCGAGGGACACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATTAGTCTTTGTCCGGACCCTTCCATAGTACACCTTAGCGCTGAGACTGAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NTATTAGTCTTTGTCCGGACCCTTCCATAGTACACCTTAGCGCTGAGACTGAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGGTGTTGGAGGACAAAATCCCCTACCATTTTCACGTTGTGCTACTAAGAGATC
                                     NOS: 22
for Windows Version 4.0
                                                                                                                                                                                                                                                                         ATTGTCAATCCTTTAAATAAAGATGAACTTGGTTTC
                                                                                                                                                                                                                                                                                                                                   GTTGGGAGGCTAACGAGTCTACCTCCCTCTTTGTAAATCAAAGAATTGTTTAAA 3431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ttgtgaataggtaggtagctagtcacacttttcagaccaattcaaactgtctatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          aCTCTGCTGGACGGACCATTAGGGGCCTTGCCAAGGTCTACCTTAGAGCAAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTCTGCTGGACGACCATTAGGGGCCTTGCCAAGGTCTACCTTAGAGCAAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTGGTGTTGGAGGACAAAATCCCCTACCATTTTCACGTTGTGCTACTAAGAGATC
                                                                                                                                                                                                                                                                                      3472
                                                                                                                                                                                                                                                                                                                  3584
                                                                                                                                                                                                                                                                                                                                                                                                                                 3464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2864
```

\$ B \$	8 Q B	8 B 8	Db Qy	B 8	B &	용 성	gg Qy	B 8	B 8	g Q	B 8	B 8	Qy db	B &	Query Best I Matche	; ORG/ US-09-96
TGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGAAAATCCACTCTAGTCCCTAC		732 TACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGATTG	672 CATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAAT 731	612 AGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCCCACATTTTGGAAGC 671	552 GATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAAAGTGGAACGGAAAA 611 	492 GTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTGTTGTCATGGCCCATGAGAT 551	432 TCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGCACACCACCATTACATCATC 491	372 GGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCCAGTCACCACCAGCCTGACC 431	312 TTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAAGAGAAAAGAGACATTCACTT 371	252 TCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGAATCAAATGTGAGGGGCTGC 311	192 GCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATGCGCTGGCTG	132 CGTTTCCCTCTGAGGGAATTGGGAGGTCGGCGCCCCAAAAGCTTTCAGTCCAGTGTAAA 191	72 GCGGCGCCTCGCAAGTCCGGGAGGCGAGGGGGGGCCCGAGGGGAGACGCCGTGACAACTTT 131	12 GAGGAGGAGAGGGACGGGACGCGAGCGGAGCGGAGCCGCC	Query Match 57.2%; Score 3118; DB 9; Length 3496; Best Local Similarity 99.9%; Pred. No. 0; Matches 3458; Conservative 0; Mismatches 2; Indels 2; Gaps 2;	ORGANISM: Homo sapiens 09-964-277-1
Q	D Q D	& B &	, B &	B &	B 8	₽ \$, B &	B 8	B 8	B 8	B 8	음 성	Db Qy	8 8	? ₽ \$	S B
1992 TTCGGTCAGAACCAGCAGCAGTGGCACCAGCCCAGAGGTCCCTTTTATCTCCACTGCATCG	1896 CTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCTGATAAGGAGGAAGC 1955 1932 CAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAGAGCAAGCGATTGCA 1991	1812 TGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGA			1632 CGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGCGCTCAGTGGGCTGCACCT									116	056	

Db &	3155 CAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCATATCTGGTAGCCCATTTTC 3214	망
₹	w	Ş
g &	9	Db
Ü	071 AGCATCACTCTGGACGGACGGACGATTAGGGGGCTTTGGGAACGTTTAGGGGACGTTATAGAGGAACAG	Ş
ę Q	3011 AAATGATCCTATCCAAAAGCTGATTCACAAACCCACGCTCACCTGACAGGCGAGGGAGG	유 성
Qy dd	975	D 4
Db		₽ ₽
S	2891 CTCAAATATTAGTCTTTTGTCCGGACCCTTCCATAGTACACCTTAGCGCTGAGACTGAGCC 2950	β
D Q	2855 TGTCTTTGGTGTTGGAGACAAAATCCCCTACCATTTT-CACGTTGTGCTACTAAGAGAT 2890 2855 TGTCTTTGGTGTTGGAGACAAAATCCCCTACCATTTTCCACGTTGTGCTACTAAGAGAT 2914	B &
Best Lo Matches	795	₹ ₽
Que	2772 GACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTCTTGTTCTTAAAAAAGCAAG 2831	Ś
, i	2735 AGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCAGATGCTAGAATCCCCCCTA 2794	망
	12	Ś
; LENGT	71	ß 5
S S	615	d _D
· · ·	-C 2	Ş
00'	6 6	Ъ
	532 CTGAGAAGAAAGACACTTGTGACTTCTATAGACAATTTTTTTT	δ
; GENERA ; APPLI	49	gb ·
; Sequen ; Patent	472 GCTGGGGAAAGTGGGCAGTCAGTCTAGTTTTTTCGGCAAGAATCAGAAAATTTTTTTT	8
RESU US-0	- 7	B 8
ф	2376 CAGAGCTGACTCGCGGGGGAGCTGGCATGAAGAGAGCCCCTTTGAAAAGCAGTTTAAACG 2435	Дb
8	N	Ş
DЬ	2316 CCAGCTGCCCACTTGCGGAGACCCAGTCTATTCTGTGCGCAGGCGGCAGAAGCCAAGTGA 2375	DЬ
Qy	N	Ş
ДЪ	2256 CTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCTGCCTACAGCTGCAG 2315	뮹
ργ	N .	Ş
da	21/2 CCCCAGACCICIACCCCTICCCTGACCAGCAGCAGCAGTATTTGCCACAGAGTCCTCACA 2231	B &
Q .	2 2	? E
Db :	2112 GCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCACTCGGATATCTTGGC 2171	3 5
- -		?

```
09-816-494-1
equence 1, Application US/09816494
atent No. US2002034807A1
ENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR
FILE REFERENCE: 10448-030002
CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR APPLICATION NUMBER: US 60/191,858
NUMBER OF SEQ ID NOS: 10
NUMBER OF SEQ ID NOS: 10
NUMBER: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                              / Match
Local Similarity
nes 3299; Conserva
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NGTH: 3544
PE: DNA
GANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3/KEY: CDS
ATION: (589)...(2583)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3431 AATGGGATTGTCAATCCTTTAAATAAAGATGAACTTGGTTTC 3472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3335
                        473
                                                             464
                                                                                                 413
                                                                                                                                404 GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTTGCC
                                                                                                                                                                             353
                                                                                                                                                                                                                    344
                                                                                                                                                                                                                                                          293
                                                                                                                                                                                                                                                                                                 284
                                                                                                                                                                                                                                                                                                             233 CGCTGGCTGCTCCAAAGCATCTTTTGTTGTTGGAATGGTTATTCCAGTCATCTCTTTATGA 292
                                                                                                                                                                                                                                                                                                                                                                  224 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                                                                                                                                                                                                                                                                                                                                                                         3371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3191 TAGGCATTGTGAATAGGTAGGTAGGTAGTCACACTTTTCAGACCAATTCAAACTGTCTAT 3250
                                                   AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC 472
                                                                                                                                                                                                         ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA 352
ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGGCTTATTG
                                                                                                                                                      GAGAAAGAGACATTCACTTGGAGGCTCTTGCTGAAAATGGGTTTAACTCTCTTTTTGCC 412
                                                                                                                                                                                                                                                                                     CGCTGGCTGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AATGGGATTGTCAATCCTTTAAATAAAGATGAACTTGGTTTC 3496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTCTTTGTAAATCAAAGAATTGTTTAA 3454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACCTGGCAACATCACGATTTA 3370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTCTTTGTAAATCAAAGAATTGTTTAA 3430
                                                                                                                                                                                                                                                                                                                                                                                                                                                56.5%; Score 3079; DB 9; Length 3544; ilarity 99.9%; Pred. No. 0; Conservative 0; Mismatches 2; Indels 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                              1;
                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                532
                                                                                                                                463
                                                                                                                                                                                                                                                                                                                                                                     283
```

ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAAGAGGACTTATTG

613 GCGTGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGG 16	SECOND S	493 CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGACGCCCCTCAGTC 15	433 AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCC	373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA 143 	313 TCATGAAGAGATGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA		3 TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGAT 125	1133 ACTITATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA 1192	073 124	1013 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC 1072	953 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACACTTGGGC 1012	893 ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAA 952 	833 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGGTTCAACTCTGTTC 892 	773 TTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	713 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA 772 	653 CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC 712	593 TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA 652 	533 TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC 592
Оу 2693 (Qy 2633 : Db 2683 :	ωω	Qy 2513; Db 2564;	2453 2504	Qy 2393 : Db 2444 :	Oy 2333 (Qy 2273 A Db 2324 A	Qy 2213 : Db 2264 :	2153 2204	144	2033	1973 2024	1913	1853	1844	1784	1673 1724	1664
CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAACAATGGAAGGGCA 2752	TATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT 2692 	TTTTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	TGGAAATCATTGAGGTCTCCTGAGAAGAAGACACTTGTGACTTCTATAGACAATTTTTT 2572 	AGAACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGT	TTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGGAGCATCATGTCAG 2452 	GGCGGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGACCCCCT 2392	ACTCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA 2332	TTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTT 2272		TCGGCCTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCT 			ICCTGATTAGGAGGAGCCAGCATCCCCAGGAGCTGCAGAGCCGGGCAGGCCTTCAGACA	CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCA 1912	GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA 1903	CCTTCTCTCTGARTATCAARTCAGTTTCAFATTCAGCCAGCAIGGAGCAGCATCCTTACAIG 1/92	GGTTCAGTIGGGCTIGCACCTIGTTCCGCAGACAGCGTGGAAGACAGCAATAAGCTCAAGCGTT 1732	

```
RESULT 20
US-10-377-072-25

US-10-377-072-25

Sequence 25, Application US/10377072

Publication No. US20040009501A1

GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals Inc.

APPLICANT: Curtis, Rory A.J.

APPLICANT: Logan, Thomas Joseph
APPLICANT: Information, Maria A.

APPLICANT: Meyers, Rachel E.

APPLICANT: Williamson, Mark J.

APPLICANT: Rudolph-Owen, Laura A.

APPLICANT: Chun, Miyoung

APPLICANT: Tsai, Fong-Ying

TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES

TITLE OF INVENTION: AND USES THEREFOR
                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                             뮍
                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               뭐
                                                                                                                                                                                                       3523
                                                                                                                                                                                                                          3473
                                                                                                                                                                                                                                              3463
                                                                                                                                                                                                                                                                                    3403
                                                                                                                                                                                                                                                                                                                           3343
                                                                                                                                                                                                                                                                                                                                              3293
                                                                                                                                                                                                                                                                                                                                                                   3283
                                                                                                                                                                                                                                                                                                                                                                                                                           3173
                                                                                                                                                                                                                                                                                                                                                                                     3233
                                                                                                                                                                                                                                                                                                                                                                                                          3223
                                                                                                                                                                                                                                                                                                                                                                                                                                               3163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2863
                                                                                                                                                                                                       AA 3524
                                                                                                                                                                                                                          AA 3474
                                                                                                                                                                                                                                           CTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC
                                                                                                                                                                                                                                                                                                                                    CTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC 3352
                                                                                                                                                                                                                                                                                                                                                              TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCCACGCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTGTTCTTAAAAAGCAAGTGTCTTTGGTGTTTGGAGGACAAAATCCCCTACCATTTTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TIGITCITAAAAAAGCAAGIGTCITIGGIGITIGGAGGACAAAATCCCCTACCATITICAC 2872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGACAGCCGAGGACACGAGCATCACTCTGCTGGACGGACCATTAGGGGCCCTTGCCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GATGCTAGAATCCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCA
                                                                                                                                                                                                                                                             3472
                                                                                                                                                                                                                                                                                                   3412
                                                                                                                                                                                                                                                                                3462
                                                                                                                                                                                                                                                                                                                      3402
                                                                                                                                                                                                                                                                                                                                                               3342
                                                                                                                                                                                                                                                                                                                                                                                 3292
                                                                                                                                                                                                                                                                                                                                                                                                    3282
                                                                                                                                                                                                                                                                                                                                                                                                                        3232
                                                                                                                                                                                                                                                                                                                                                                                                                                            3222
                                                                                                                                                                                                                                                                                                                                                                                                                                                              3172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2862
            δ
                                  밁
                                                       S
                                                                            밁
                                                                                              S
                                                                                                                   밁
                                                                                                                                   Ş
                                                                                                                                                           밁
                                                                                                                                                                           Ş
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                         片
                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                       Ş
```

```
; ORGANISM: Homo Sapiens FEATURE: ; NAME/KEY: CDS ; LOCATION: (589)...(2586) US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
FRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR PILING DATE: 2000-06-29
PRIOR PILING DATE: 2000-11-28
PRIOR FILING DATE: 2000-11-28
PRIOR FILING DATE: 2000-01-28
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR PILING DATE: 2000-04-25
PRIOR PILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR PILING DATE: 2001-05-21
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR FILING DATE: 2011-03-22
PRIOR PILING DATE: 2011-03-23
PRIOR PILING DATE: 2011-03-23
PRIOR RILING DATE: 2011-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; SEQ ID NO 25
; LENGTH: 35
; TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 56.5%;
Best Local Similarity 99.9%;
Matches 3299; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 114 SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      O NO 25
GTH: 3544
  704
                                        653
                                                                                644
                                                                                                                    593
                                                                                                                                                             584
                                                                                                                                                                                                     533
                                                                                                                                                                                                                                             524
                                                                                                                                                                                                                                                                                      473
                                                                                                                                                                                                                                                                                                                              464
                                                                                                                                                                                                                                                                                                                                                                  413
                                                                                                                                                                                                                                                                                                                                                                                                             404
                                                                                                                                                                                                                                                                                                                                                                                                                                                   353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              233
                     CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                              ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                               AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTTGAGCCTTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                              GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCAAATGTGAGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                               TGGAAAGTGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                        TIGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                         AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                        GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGCTGGCTGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGCTGGCTCCAAAGCATCTTTTGTTGTTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 3079;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DΒ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                 712
                                                                                                                  652
                                                                                                                                                                                                 592
                                                                          703
                                                                                                                                                           643
                                                                                                                                                                                                                                         583
                                                                                                                                                                                                                                                                                  532
                                                                                                                                                                                                                                                                                                                        523
                                                                                                                                                                                                                                                                                                                                                                  472
                                                                                                                                                                                                                                                                                                                                                                                                        463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          292
                                                                                                                                                                                                                                                                                                                                                                                                                                               412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           232
```

1553 CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGACAAAGGCCCGTGCATCCCGCCA 1612	GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACA 1	ITTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAA ITTCTTCCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAA ITTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAA ITTCTTCCCAATCTTTATCTTGGCTGAAATGCCAGCTATACCTGTCCAAA AGAATGGGATTGGTTATGTTGTTAAATGCCAGCAATACCTGTCCAAA AGAATGGGATTGGTTATGTTGTTAAATGCCAGCAATACCTGTCCAAA CCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGA CCGAGTCTCATTTCCTGCGTGTGCCTGTGAAATGACAGCTTTTGTGA CCGAGTCTCATTTCCTGCGTGTGCTTGAAAAGCAAAAAGCCTCCAAA CCGAGTCTCAAATCAGTAGATTTCATTGAAAAAGCAAAAAGCCTCCAAA CCGTTGGACAAATCAGTAGATTTCATTGAAAAAGCAAAAAGCCTCCAAA CCGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAAAGCCTCCAAA CCGAGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAAAGCCTCCAAA CCGAGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAAAGCCTCCAAA CCGAGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAAAGCCTCCAAA CCGAGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAAAGCCTCCAAA CCGAGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAAAGCCTCCAAA CCGAGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAAAGCCTCCAAA CCGAGTTGGACAAATCAGTAGAATTCAGTAGATGAAAAGCACTCCAAAAAACCCTCCAAA CCGAGTTGGACAAAATCAGTAGAATTCAGTAGATGAAAAGCAAAAAAGCCTCCAAA CCGAGTTGGACAAAATCAGTAGAATTCAGTAGATGAAAAAACCTCCTCCAAAAACCATCAGTAGAATGAGTAGAAAAAAAA	AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
, 			· · · · · · · · · · · · · · · · · · ·
8 8 8 8 8 8 8 8 8	2 8 8 8 8 8 8 8 8 8	. 6 6 6 6 6	D
2633 TATTTTTGAAAATGGAGCTATGGTGTTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT [4-H H-H W-W H-H G-G	2093 TCGGCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGAGGCCTTAAGGGCT	1793 GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGA

```
Sequence 25, Application US/10377072

| Sequence 25, Application US20040157221A9
| GENERAL INFORMATION: US20040157221A9
| GENERAL INFORMATION: MILENTIAM PHARMACEUTICALS. | APPLICANT: MILENTIAM PHARMACEUTICALS. | APPLICANT: MILENTIAM PHARMACEUTICALS. | APPLICANT: Curtis, Rory A.J. |
| APPLICANT: Curtis, Rory A.J. |
| APPLICANT: Curtis, Rory A.J. |
| APPLICANT: Clucksmann, Mark J. |
| APPLICANT: Miliamson, Mark J. |
| APPLICANT: Miliamson, Mark J. |
| APPLICANT: Rudolph-Owen, Laura A. |
| APPLICANT: Tsai, Fong-Ying |
| APPLICANT: Tsai, Fong-Ying |
| APPLICANT: Tsai, Fong-Ying |
| APPLICANT: Tsai, Fong-Ying |
| APPLICANT: Tsai, Fong-Ying |
| APPLICANT: Tsai, Fong-Ying |
| APPLICANT: Tsai, Fong-Ying |
| APPLICANT: Tsai, Fong-Ying |
| APPLICANT: Tsai, Fong-Ying |
| APPLICANT: Tsai, Fong-Ying |
| APPLICANT: Tsai, Fong-Ying |
| APPLICANT: Tsai, Fong-Ying |
| APPLICANT: Tsai, Fong-Ying |
| APPLICANT: Tsai, Fong-Ying |
| APPLICANT: Tsai, Fong-Ying |
| APPLICANT: Tsai, Fong-Ying |
| APPLICANT: UNMBER: US 0934, 26335, 50365, 21117, |
| TITLE OF INVENTION: AND USES THERREFOR |
| TITLE OF INVENTION: AND USES THERREFOR |
| FILE REFERENCE: MPTO3-03-085, 860 |
| PRIOR APPLICATION NUMBER: US 09/895, 860 |
| PRIOR APPLICATION NUMBER: US 09/723, 806 |
| PRIOR APPLICATION NUMBER: US 09/723, 806 |
| PRIOR APPLICATION NUMBER: US 60/187, 455 |
| PRIOR APPLICATION NUMBER: US 60/187, 455 |
| PRIOR APPLICATION NUMBER: US 09/843, 297 |
| PRIOR APPLICATION NUMBER: US 09/843, 297 |
| PRIOR APPLICATION NUMBER: US 09/843, 297 |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 21
US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTCTCAGCTTTATGAAGAGAAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCCTCTTTGTA 3412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTACCTTAGAGCAAAACCCAGTACCTCAGACAGGAAAGTCGGGGGCTTTGACCACTACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT 3172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2982
                        δ
                                                        밁
                                                                                Ş
                                                                                                                       밁
                                                                                                                                                   Ş
                                                                                                                                                                                         뮍
                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; NAME/KEY: CDS
; LOCATION: (589)...(2586)
US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR FILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR FILING DATE: 2001-05-21
PRIOR FILING DATE: 2000-05-19
PRIOR FILING DATE: 2000-05-19
PRIOR FILING DATE: 2001-03-23
PRIOR FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR PRILING DATE: 2001-03-22
PRIOR FILING DATE: 2001-03-22
Remaining Prior Application data removed - 12
ROMMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 3299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Fast
SEQ ID NO 25
LENGTH: 3544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
nes 3299; Conserv
                        833
                                                         824
                                                                                       773
                                                                                                                         764
                                                                                                                                                        713
                                                                                                                                                                                         704
                                                                                                                                                                                                                           653
                                                                                                                                                                                                                                                            644
                                                                                                                                                                                                                                                                                             593
                                                                                                                                                                                                                                                                                                                           584
                                                                                                                                                                                                                                                                                                                                                             533
                                                                                                                                                                                                                                                                                                                                                                                              524
                                                                                                                                                                                                                                                                                                                                                                                                                             473
                                                                                                                                                                                                                                                                                                                                                                                                                                                               464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    173
CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC
                                                                      CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                       AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                                                                                            TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FastSEQ for Windows Version 4.0
                                                                                                                     AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                        CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                                                                       TGGAAAGTGGAAAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                                        TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                                                                                                              TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                       ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                              ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGCTGGCTGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCCAAAGGTAAAGAATGATGTAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGCTGGCTGCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               56.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 3079; Di
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ۲
ا
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                    832
                                                    883
                                                                                                                     823
                                                                                                                                                     772
                                                                                                                                                                                                                                                                                        652
                                                                                                                                                                                                                                                                                                                                                         592
```

292 283

412

763 712 703 643

Qy 1913 Db 1964	Qy 1853 Db 1904	Qy 1793 Db 1844	Qy 1733 Db 1784	Qy 1673 Db 1724	Qy 1613 Db 1664	Qy 1553 Db 1604	Qy 1493 Db 1544	Qy 1433 Db 1484	Qy 137 Db 142	Qy 1313 Db 1364	Qy 125 Db 130	Oy 1193 Db 1244	Qy 113 Db 118	Qy 107 Db 112	Qy 101 Db 106	Qy 95 Db 100	Qy 89 Db 94
		െ—െ	0-0	CGCTCAGTGGGCTGCA	െ				3 CTACTATATCTCCAAA 		3 GTGTTCTAGTGCACTG		ACTTTATCCCCGAGTC	TGATACAGCAGAATGG	CAACCCGAATTCTTCC	AATCCACTCTAGTCCC	3 ACCTGCTTGCAGGTGG
NGCCAGCATCCCCAAGAAG 	STTCTCCCCTGTTCAGGAA(agatgctttggaatactacj 	Capatcagtttcatattca 	CTGTCCGCAGACAGGCTGG	DAGCGTGCAGCCGTCGCTG	IGCTACCTCAGAGGCAGCA GCTACCTCAGAGGCAGCAG	IGCTGTCTCAGAGGGTGGA 	ATCAGGGCCAAAGAGCAAA 	CTTCAATTTTCTGGGCCAA	CATGTCTTTAGATGAAGCT! 	TTTAGCTGGGATCTCCCGC	CAAATCAGTAGATTTCATTY CAAATCAGTAGATTTCATTY		Sattggttatgtgttaaat Sattggttatgtgttaaat	CAATCTTTATCTTGGCTGC CAATCTTTATCTTGGCTGC	TACCTGCATTTCTCAGCCT' TACCTGCATTTCTCAGCCT'	GTTTGCTGAGTTCTCTCGT GTTTGCTGAGTTCTCTCGT
GTCCTGATAAGGAGGAAGCCAGGATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA	CCAACAAGCTATGCCAGTTCTCCCCCTGTTCAGGAACTATCGGAGCAGACTCCCCGAAACCA	CTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA 	CTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGC	GCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT	CGTGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGG	CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGACGACGACGACGGCCGTGCATCCCGCCA	CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGACGCCCCTCAGTC	AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGC	CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA	TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA	TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGAT	ACTITATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA	TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG	CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGAG 	AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGG	ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAA
CAGACA 1972 AGACA 2023	NAACCA 1912 NAACCA 1963	NTGGGA 1852 NTGGGA 1903	TACATG 1792 TACATG 1843	AGCGTT 1732 AGCGTT 1783	TACAGG 1672 ACAGG 1723	CGCCA 1612 CGCCA 1663	CAGTC 1552 CAGTC 1603	\GAAGC 1492 \GAAGC 1543	AGATTA 1432 AGATTA 1483	\AAGAC 1372 \AAGAC 1423	CCTACA 1312 CTACA 1363	ATGGAT 1252 ATGGAT 1303	чдалаа 1192 √ 1√	AGCCTG 1132 AGCCTG 1183	AGGAGC 1072 AGGAGC 1123	rrggc 1012 rrggc 1063	AAGGAA 952 AAGGAA 1003
g Sy	}	S B 8) Db Q4	D 49	B &) B &	p 8	S B S	p 5	?	}	} B €	S B &) B	S B 7	S B 7	S B
2993 TAGTGGTAAATC	υ ω υ	/3 GIIGIG	63 13	. ω	ω ω	, ω ω	, ω ι		2 2	ت ختد د	2 4 2	2 2			4 4	9 8 6	2024 GCCAGAGCAAGC
TAGTIGGTAAATICAAGAGAATIGATICCIATICCAAAGCTGATTCACAAACCCAGGCTCACC 	AGCGC GAGAC GAGCANG 199509 CAGGI AGGCC GAGACACC GAGACACCC GAGA	TOROUND STANGARDA ICICAMAINI I AGII II II II II II II II II II II II II	TIGITCITAAAAAGCAAGTGTCTTTGGTGTTGAAGAACAAATCCCCTACCATTTTCAC	GATIGCTAGAATICCCCCTAGACGAAGGAAAACCATTTTATTCAGTGAATTACACATCCTC	CTCTTAACATCTGCATTTGAGKAATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCA		TITICITICALANAAAATICCCTGTAAATCTGAAATATATATATGTACATA	TUSTANAICAIIGANGS ICICCIONANASACACHOIIGEANAICANAICHAIIGEANAICAN ICANASACHAIIIIII 			GCCGCAAAGCCAAAG IAACAAAGACCI GACI CUCCGCAGAGCI IIIIIIIIIIIIIIIIIIIIIIIIIIIII	ACTOTOCOLA ACHOLAGO CONCOLAGO CONCOLAGO CONTOCOCOLAGO CONTOCOCOLAGO CONTOCOLAGO INCLUMENT INCL			TIGGCCTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCT	GCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCACCAGAGGTCTTTTTTTT	
CAAAGCTGAITCACAAA 	AGGTAGGTAGACCCTGTT	COTTO COTTO CA COCTOTTO	TTGGAGGACAAAATCCCCT	ACCATTITATICAGIGAA	ATACTICICARCAAA natacttctctcaacaaa	NGCAACAGGIGGATCAACA	TCTGAAATATATATATATG		TGGGCAGTCAGTCTAGCT	HATTEGAATTTGGAGAGAGA		CTTGCGGAGACCAAGTCT	CTCAGCCATCTACGGAGCTCT	CTACCCTTCCCTGACCAGC	CEAAGTCTGCTGGCCTGG		
CCACGCTCACC 3052			א נא נ	N N	N N		CATATA 26	TACATACATATA 2622	N N 1				GCAGTGCCAGTT 2323		220		

	Oy 72 GCGGCGCCTCGCAAGTCCCGGGAGGGGGAGAGGGCGAGGGGAGAACGTTT 131	Oy 12 GAGGAGGAGAGCGAGAGGGGAGGGGAGGGGAGCGGAGC	Query Match 56.3%; Score 3069; DB 18; Length 3521; Best Local Similarity 99.9%; Pred. No. 0; Matches 3459; Conservative 0; Mismatches 3; Indels 2; Gaps 2;	; LENGTH: 3521 ; TYPE: DNA ; ORGANISM: Homo sapien US-10-370-715B-261	SECO			; PATIN DOCKET PREVIEW ; APPLICANT: BODARY, SARAH C. ; APPLICANT: CLARK, HILLARY ; APPLICANT: BRISDELL, HUNTE	ence 261, Apcation No.	RESULT 22	3473 AA 3474	Qy 3413 AATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA	OY 3353 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC			ω ω	CTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGGTAG	Qy 3113 TCTACCTTAGAGCAAACCCAGTACCTCAGACAGAAAGTCGGGGCTTTGACCACTACCAT 3172	Qy 3053 TGACAGCCGAGGACACGAGCATCACTCTGCTGGACGGACG
₽ Q	B 8	Db - 29	Db Qy	D Q	p Q	B 8	D Q	B 8	B 8	β Q	Db	& B	8 8	Q VO	\$ 8	당 왕	υЬ	Q B	Q Db
1212 ATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTT 1271	1152 TITCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTGCCGTGGTTGGACAA 1211	1092 TGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCA 1151	1032 TCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAGCAGAATGGGAT 1091 	972 CTGCATTICTCAGCCTIGCTIACCTGTTGCCAACATTGGGCCAACCCGAATTCTTCCCAA 1031	912 TGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCACTCTAGTCCCTAC 971	852 TGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCAGGTGGGTT 911	792 TGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	732 TACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGATTG	672 CATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAAT 731 	612 AGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCCCACATTTTGGAAGC 671		518 GTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTGTCATGGCCCATGAGAT 577 552 GATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGTGCTCTGCTGGAAAGTGGAAACGGAAAA 611	458 TCATACACTTTTAGTACAATGAGTGGAGTGAGCCTTTGAGCACCACCACCACTACATCATC 517 492 GTGGCAAATTAAAGAAGGAGGTGGGAAAAAGAGGACTTATTGTTGTCATGGCCCATGAGAT 551	398 GGAGGGCTCTTGCTGAAAATGGGTTTTAACTCTCCTTTTGCCAGTCACCAGCCAG	372 GGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCCAGTCACCACCCAGCCTGACC 431	312 TTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAAGAGAAAGAGACATTCACTT 371		218 GCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATGCACTGGCTGCTCCAAAGCA 277 252 TCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGAATCAAATGTGAATGAGGGGCTGC 311	158 CGTTTCCCTCTGAGGGAATTGGGAGGTCGGCGCCCCAAAAGCTTTCAGTCCAGTGTAAA 217 192 GCTGTTGGAGGGCGGGAGCAAAGGTAAAGGTAAAGGATGATGATGCGCTGGCTG

Db	ş	g Q	B 8	B 8	B 8	용 <i>성</i>	용 성	B &	유 성	유 성	용 성	g &	용 성	<u> </u>	B 8	B 8	B &	ष्ट्र १	
gCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGGCAGAAGCCAA	2 CCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGGCAGAAGCCAAA	2232 CTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCTGCCTACAGCTGCAG 2291	2172 CCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCCACAGAGTCCTCACA 2231	2112 GCAGCACCTCACGAAGTCTGCTGGCCTTGGGCCTTAAGGGCTGGCACTCGGATATCTTGGC 2171	2052 AAGTGGGAGGACGAGGACAATTACCACACCAGCTTCCTTTTCGGCCTTTCCACCAGCCA 2111	1992 TTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTATCTCCACTGCATCG 2051	1932 CAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAGAGCAAGCGATTGCA 1991	1872 CTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCTGATAAGGAGGAAGC 1931 	1812 TGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAACAAGCTATGCCAGTT 1871 	1752 ATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTCTCCTCATCAGAAGA 1811	1692 GTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTCTCTCTC	1632 CGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCT 1691	1572 TACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGCCCAGCGTGCCCAGCGTGCCCAG 1631	1512 TGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCCTGTGCCGACTCTGC 1571	1452 AGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAATGAACCTGTCCCTGC 1511	1392 CAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAACCAGACTGGAGCATC 1451 	1332 GTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAAAAAAGACCTACTATATCTCCAAACTT 1391 	1272 AGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATGAAGAGGATGGACAT 1331	
Q ;	ይ &	₽ \$? B 4	S B 8	S & &	S & &	, B &	}	S & &	}	B &	}	Db QQ	B &) B &	}) B 5		?
AATGGGATTGTCAATCCTTTAAATAAAGATGAACTTGGTTTCAA 3474	3371 AGCTAAGGTTGGGAGGCTAACGAGTCTACCTCTCTCTTTGTAAATCAAAGAATTCTTTAA 3430			TAGGCATIGTGATAGGTAGGTAGGTAGTCACACTTTTCAGACCAATTCAAACTGTCTAT TAGGCATTGTGAATAGGTAGGTAGGTAGTCACACTTTTCAGACCAATTCAAACTGTCTAT	3131 CAGTACCTCAGACAGGAAAGICGGGGCTTTGACCACTACCATATCTGGTAGGCCCATTTC 3190	AGCATCACTCTGCTGGACGAACCATTAGGGGCCTTGCCAAGGTCTACCTTAGAGCAAACC 	AMATIGATIC LATE CAMAGE TO ALTER CAMAGE CACCE TO ACCAGE COMPOSEMENTAL ANALYSIS OF ALAREST COMPOSEMENT ANALYSIS OF ALAREST CACADA CCCCACCCTCACCTGACAGCCGAGGGAACACG	AGU I 196999 I CASS I AGAI AGAIC E IS I IAGGACAGAIGE E I AGI ISGI AGAI I CLAAGAG 	CILCHARIAIIA IASICII ISICIGSACCE IICCA IASIACACE II SCOELISASAE ISASCE 	GIGICITITEGIGITIGAGGACAAAAICCCCTACCATTITCACGTIGIGCTACTAAGAGAT 			TATGGTGTAAAAGCAACAGGTGGATCAACCCAGTT-GTTACCTCTTAACATCTGCATTT 	ATTICCCTGTRAATCTGAAATATATATATGTKCATACATATATATTTTTTGGAAAATGGAGC		GCT19593AAAGT1939CAGT1CAGTCTTATCGGGCAGCATGAAATCATTGAGGTCTCGGTCGAGAAATCATTGAGGTCTCGCTGGGAAAATCATTGAGGTCTCGGTCGG		2322 CARAGETERIC LOGICIOS DE LIGICALIGNAMANCIC CE LI LIGARMANGE CRETITARICO 2411 [1]	ひろとなる にも 山田 ひろくしん てんてん 山田 山山 しんしん しんじん でんしん しんしん しんしん しんしん しんしん というしん しんしん しんしん しんしん しんしん しんしん しんしん しんしん

```
Sequence 1, Application US/10257026

Publication No. US20040086859A1

GENERAL INFORMATION:
APPLICANT: Merck Patent GmbH

ITILE OF INVENTION: New dual specificity phosphatase
FILE REFERENCE: DUSP10KDWS
CURRENT APPLICATION NUMBER: US/10/257,026

CURRENT FILING DATE: 2003-11-07

NUMBER OF SEQ ID NOS: 3
SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 1
LENGTH: 3059
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
TYPET DNA
ORGANISM: Homo sapiens
                                           8
                                                                        밁
                                                                                           δ
                                                                                                                    뮍
                                                                                                                                              5
                                                                                                                                                                            g
                                                                                                                                                                                               S
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; NAME/KEY: CDS
; LOCATION: (127)..(2121)
US-10-257-026-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 23
US-10-257-026-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 52.1%;
Best Local Similarity 99.9%;
Matches 3057; Conservative
                       601
                                                                                                 952
                                                                                                                           481
                                                                                                                                                                              421
                                                                                                                                                    892
                                                                                                                                                                                                      832
                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                        772
                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                           712
                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                             652
                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                 592
                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       412 CAGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               \vdash
                                  CCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACGAG
                                                                    AAATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGG
                                                                                                                      CACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGGCCTCTGTGAAGGA
                                                                                                                                   CCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAG
                                                                                  AAATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGG
                                                                                                                                                                                       ATTGATTGCAGTCAGAAGGTTGTAGTTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTC
                                                                                                                                                                                                                                                                                            CAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGGAAACATAAGGTTGAC 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGGGCTTATT
                                                                                                                                                                                                                            ATTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTC
                                                                                                                                                                                                                                                                             CAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGAC
                                                                                                                                                                                                                                                                                                                               ACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTG
                                                                                                                                                                                                                                                                                                                                              ACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTG 711
                                                                                                                                                                                                                                                                                                                                                                                TGGAAAGTGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAAATACAAT
                                                                                                                                                                                                                                                                                                                                                                                                CTGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                    GTTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACACCACTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAAGAGGACTTATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 2837; DB Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 3059;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                           1071
                                                                                             1011
                   099
                                                                    600
                                                                                                                       540
                                                                                                                                                                          480
                                                                                                                                                                                                  891
                                                                                                                                                951
                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                    831
                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                             651
                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                               591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    471
  Ś
                         뫄
                                               S
                                                                             뮍
                                                                                                    Ś
                                                                                                                                 밁
                                                                                                                                                     δ
                                                                                                                                                                                  밁
                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                     뮍
                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
    2152
                                                                              1621
                                                                                                       2032
                                                                                                                                 1561
                                                                                                                                                         1972
                                                                                                                                                                                    1501
                                                                                                                                                                                                                                                               1852
                                                                                                                                                                                                                                                                                         1381
                                                                                                                                                                                                            1912
                                                                                                                                                                                                                                     1441
                                                                                                                                                                                                                                                                                                                  1792
                                                                                                                                                                                                                                                                                                                                          1321
                                                                                                                                                                                                                                                                                                                                                                    1732
                                                                                                                                                                                                                                                                                                                                                                                              1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1492
                                                                                                                                                                                                                                                                                                                                                                                                                      1672
                                                                                                                                                                                                                                                                                                                                                                                                                                                1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
TGGCACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTAT 2211
                                            TTCGGCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGGTCTGGGCCTGAGGGC
                                                                                         CTTTTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTT
                                                                                                                                             AGCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCC
                                                                                                                                                                                              AGTCCTGATAAGGAGGAAGCCAGCATCCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGAC
                                                                                                                                                                                                                                                                                                                                       ACCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACC
                                                                                                                                                                                                                                                                                    GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGG
                                                                                                                                                                                                                                                                                                       GGCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGG
                                                                                                                                                                                                                                                                                                                                                                                          GCGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGT
                                                                                                                                                                                                                                                                                                                                                                                                      GCGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGT 1731
                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCGTGCCCAGCGTGCCAGCGTGCAGCCGTCGTTAGAGGACAGCCCGCTGGTACAG
                                                                                                                              AGCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCC
                                                                                                                                                                                  AGTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGAC
                                                                                                                                                                                                                                    ACCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCGTGCCCAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGACGCCCCTCAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGAACCAGACTGGAGCATCAGGGCCAAAGAGACTCAAGCTGCTGCACCTGGAGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACTITATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAA 1191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCT 1131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCACCATCGCTATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTTTGCCGTGGTTGGACAAATCAGTAGAATTTCATTGAGAAAGCCAAAAGCCTCCAATGGA 125:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGATGCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCCAAAAGCCTCCAATGGA
                         rccaccagccagcacctcacgaagrergergectgggctttaagggc
                                                                                                                                                                                                                                                                                                                                                                                                                                             IGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAG
                                                2151
                                                                            1680
                                                                                                    2091
                                                                                                                              1620
                                                                                                                                                      2031
                                                                                                                                                                                  1560
                                                                                                                                                                                                          1971
                                                                                                                                                                                                                                   1500
                                                                                                                                                                                                                                                             1911
                                                                                                                                                                                                                                                                                      1440
                                                                                                                                                                                                                                                                                                             1851
                                                                                                                                                                                                                                                                                                                                       1380
                                                                                                                                                                                                                                                                                                                                                                                          1320
                                                                                                                                                                                                                                                                                                                                                                                                                                            1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
```

Oy 1002 CAACATTGGGCCAACCCGAATT		
427	3232 ACCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGATAATTTTTTT 3291	ş
942	3172 TATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGG	ß 8
882	3112 GTCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCA 3171	유 성
822 307	3052 CTGACAGCCGAGGGACACGAGCATCACTCTGCTGGACGGAC	B &
762	2992 CTAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCAC 3051	B 8
702	2932 TTAGCGCTGAGACTGAGCCAGCTTGGGGGTCAGGTAGACCCTGTTAGGGACAGAGC 2991	B 8
642	2872 CGTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACC 2931	<u> </u>
582 GGTGGCTCTGCTGGAAAGT	2812 CTTGTTCTTAAAAAGCAAGTGTCTTTGGTGTTGGAGGACAAAATCCCCTACCATTTTCA 2871	B 8
Query Match Best Local Similarity 99.9%; Pr Matches 2844; Conservative 0;	AGATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCT	B 8
, NAME/KEY: misc_feature ; LOCATION: (1)(2966) ; OTHER INFORMATION: n = a,t,c or US-10-296-115-520	2692 TCTCTTAACATCTGCATTTGAGAGATCAGCTXATACTTCTCTCAACAAAAATGGAAGGGC 2751 	B 8
; LENGTH: 2966 ; TYPB: DNA ; ORGANISM: Homo Bapiens ; FRATTURE:	2632 ATAITTTIGGAAAANGGAGCTATGGIGTAAAAAGCAACAGGIGGATCAACCCAGTTGTTAC 2691 	B &
PRIOR APPLICATION NUMBER: US09/55 PRIOR FILING DATE: 2000-04-25 NUMBER OF SEQ ID NOS: 1478 SEQ ID NO 520	2572 TITITCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	B 8
CURRENT APPLICATION NUMBER: US/10 CURRENT FILING DATE: 2002-11-18 PRIOR APPLICATION NUMBER: US/18 PRIOR PILING DATE: 2000-01-21	2512 ATGGAAATCATTGAGGTCTCCTGAGAAGAAAGACACTTGTGACTTCTATAGACAATTTTT 2571	B 8
	2452 GAGAACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGT	B 8
RESULT 24 US-10-296-115-520 J. Sequence 520, Application US/10296 J. Sequence 520, Application US/10296	2392 TITGAAAAGCAGTITAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCA 2451 	ያ <i>ጷ</i>
Db 3000 ANATCANAGAATTGTTTAANAT	2332 AGGCGGCAGAAGCCAAGTGACAGAGGTGACTCGCGGGGGAGCTGGCATGAAGAGAGAG	B 8
2940	2272 TACTCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGC 2331	용 성
2 2 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	2212 TTTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGT 2271	B 8
2820 3292		₽

```
Ş
1002 CAACATTGGGCCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCT 1061
                                                                                                                                                                                                                                                                                 Score 2624; DB 1
Pred. No. 0;
D; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                           552,317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAAC
                                                                                          AAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACA
                                                                                                                                                                                                        AGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGC 1001
                                                                 AGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCCTGGCCT 941
                                                                                                                                 TCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGT
                                                                                                                                           )TCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                              88,725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 .0/296,115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   53248Alel Nucleic Acids and Polypeptides
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACAAAATTCCCGTGGGCCTAGATGGAGATAATTTTTTT 2879
                                                       AGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCT
                                                                                                                                                                                                                                                                                                     DB 17; Length 2966;
                                                                                                                                                                                                                                                                                  2; Indels
                                                                                                                                                                                                                                                                                  Į.
                                                                                                                                                                                                                                                                                  Gaps
                                                       426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2939
                                                                                          366
                                                                                                                                306
                                                                                                                                                                    246
                                                                                                                                                                                                         186
                                                                                                                                                                                                                                              126
                                                                                                                                                                                                                                                                 641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3471
                                                                                                             881
                                                                                                                                                 821
                                                                                                                                                                                      761
                                                                                                                                                                                                                           701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3351
```

Q	P &	B 8	D 89	문 왕	용 왕	8 8	g g	B 8	p Q	유 왕	당 왕	β Q	g &	dy Qy	DP QV	Db Qy	р У	Db
2082 CAGCTTCCTTTTCGGCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGG 2141	2022 CCAGAGGTCCCTTTTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACAC 2081	1962 GCCTTCAGACAGCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGC 2021	1902 TCCCGAAACCAGTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAG 1961	1842 TCTGGATGGGACCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGAC 1901	1782 ATCCTTACATGGCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTAC 1841 	1722 GCTCAAGCGTTCCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGC	1662 GCTGGTACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAA 1721 	1602 GCATCCCGCCAGCGTGCCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCC 1661	1542 GCCCTCAGTCCACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGAGGAAAGGCCCGT 1601	1482 CCTGGAGAAGCCAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAC 1541	1422 GAAGAAGATTAAGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCA 1481 	1362 AGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGA 1421 	1302 TATCGCCTACATCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAA 1361 	1242 CTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGC 1301	1182 TTGTGAGAAAATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGC 1241 	1122 TCCAPAGCCTGACTITATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTT 1181	1062 CAACAAGGAGCTGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTG 1121	
당 상	당 왕	B 8	B 8	B 8	g qq	B 84	유 성	g 99	Db Qy	B 8	용 성	B 8	B 8	D 40	P &	B &	}	D
3162 ACCACTACCATATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGG	3102 CCTTGCCAAGGTCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTG 3161 	26	466	06	862 346	2802 TACACATCCTCTTGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTGGAGGACAAAATCCCCT 2861	742		106	562 047	502 987	2442 CATCATGTCAGAGAACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGT	2382 AGAGACCCCTTTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAG 2441	1807 TTCTGTGCGCAGCGGCAGAACCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGA 2381	2262 CASTGCCAGTTACTCTGCCTACAGCTGCAGCCAGCCACTTGCGGAGACCAAGTCTA 2321	2402 CAGCIGGIAITIGCCACAGAGICCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGG 2261 1687 CAGCIGGIAITITGCCACAGAGTCCTACACTTCTACTCTGCCTCAGCCATCTACGGAGG 1746		1567 CAGCTTCCTTTTCGGCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGG 1626

361 GACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTTGCCAGTCACCA 42	301 TGAGGGGTTGCTTTGTGGACGGAGTCCTTTTGCAAGAGCACATCAACGGGAAAGAGAAGAGAAGA	Qy 241 GCTCCAAAGCATCTTTTGTTGGGAATGGTTATTCCAGTCATCTCTTTATGAATCAAATG 300	OY 181 TCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATGCGCTGGCT 240	OY 121 GTGACAACTTTCGTTTCCCTCTGAGGGAATTGGGAGGTCGGCGGCCCCAAAAGCTTTCAG 180	ი—ი	GAAAAGAAGACGAGGAGGAGAGAGCGACGGGACGGGAACGGGAGCGGAGCCGCC	Query Match 45.1%; Score 2459; DB 17; Length 2732; Best Local Similarity 99.9%; Pred. No. 0; Matches 2729; Conservative 0; Mismatches 3; Indels 1; Gaps 1;	; LENGTH: 2732 ; TYPE: DNA ; ORGANISM: Homo sapiens US-10-168-506-2	PRIOR FILING DATE: 2000-12-21 NUMBER OF SEQ ID NOS: 76 SOFTWARE: Patentin Ver. 2.1 SEO ID NO 2		APPLICANT: SUDARSANAM, SUCHA APPLICANT: HILL, RON APPLICANT: HILL, RON APPLICANT: FLANAGAN, PETER TITLE OF INVENTION: MAMMALIAN PROTEIN PHOSPHATASES	APPLICANT: PLOWMAN, GREGORY D. APPLICANT: MARTINEZ, RICARDO APPLICANT: MHYTE, DAVID APPLICANT: MHYTE, DAVID	US-10-168-506-2 US-10-168-506-2 ; Sequence 2, Application US/10168506 ; Publication US20040053229A1 ; GENERAL INFORMATION.	6 6	Db 2826. CACCAGGAACCTGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCT 2885 Qy 3402 CCCTCTTTGTAAATCAAAGAATTGTTT 3428	2766 3342	3282 AATTTTTTTTTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAAC	3222 CACTTITCAGACCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGAT 3
Оу 1441	Qy 1381 Db 1381	Qy 1321 Db 1321	12 12	12 2	11 11	Db 1081	Qy 1021 Db 1021	Qy 961 Db 961	Оу 901 Db 901	Qy 841 Db 841	Qy 781 Db 781	Oy 721 Db 721	Oy 661 Db 661	Oy 601 Db 601	Qy 541 Db 541	Qy 481 Db 481	Db 421	. W
ACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCTGCACCTGGAGAAGCCAAATGAA 1500	TCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATAAGAACCAG 1440 	1 AGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	GIGCACTGTTTAGCIGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAG GTGCACTGTTTAGCTGGGATCTCCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAG	TIGGTIGGACAAATCAGTAGATTICAGTAGAAAGCAAAAGCCTCCAATGATGTGTGTTCTA	CCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTGCCG	1 CAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATC 1140 	1 ATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG 1080 	1 CTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCGA 1020 	1 GCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAAATCCACT 960 	1 TGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTT 900 	1 AGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	1 AAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGATTG	1 ATTITGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGAC 720	1 GGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCCCAC 660	1 GCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAAAGT 600 		CAGCCTGACCTCATACACTTTTAGTACAATGAGTGGCTGAGCCTTTGAGCACACCACC	

Db 14	521 ATTGAGGTCTCCTGAGAAGAAGACACTTGTGACTTCTATAGACAA-TTTTTTTCTTG 257	Db
0у 1	у I	ş
Db 13	46	ఠ
Qy 15	****	Ş ;
Db 13	2401 CAGTTAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGAGCATCATGTCAGAGAACAGG 2460	용 &
Db 12	2341 AAGCCAAGTGACAGAGCTGACTCGCCGGCGGAGCTGGCATGAAGAGCCCCTTTGAAAAG 2400	В
	2341 AAGCCAAGTGACAGAGCTGACTCGCGGGGGGAGCTGGCATGAAGAGAGCCCCTTTGAAAAG 2400	Ş
מם 12	N) /	망
0у 13	281 TACAGCTGCAGCTAGCTCACATTACACATCACAGCCAGTTACAGCCAGTTACAGCGCC	8 1
	2 8	B 5
ου 12	161	B
Qy 12		Ş
Db 1	2101 TCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTTGGGCCTTAAGGGCTGGCACTCG 2160	뮹
0у 11		ş
	2041 CCACTGCATGGAAGTGGGAGGGGAGATATTACCACACCACCTTCCTT	₽ 5
OV 11	1	P &
Query Mat Best Loca	1981 AAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTATCT 2040	γQ
US-09-964	1921 AAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACTGCCAGGCCTTCAGACAGCCAGAGC 1980	ф
; TYPE:	198	Ş
; SEQ ID NO ; LENGTH:	1861 CTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCTGAT 1920	유 성
; CURREN	-	망
; TITLE ; FILE R	1801 TCATCAGAAGATGCTTTTGGAATACTACAAACCTTTCCACTACTCTTGGATGGGACCAACAAG 1860	Ş
; APPLIC		Db
; Sequenc ; Patent	741	8
RESULT 26 US-09-964-		B 8
5	AGCGTGCC	망
γ γ	1621 AGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTCAGT 1680	γQ
Db	16	망
Q	C 162	ş
Db	01 CCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCTCAGTCCAGTCCACTTT 156	ర్జ
γQ		Q
_	1441 ACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAATGAA 1500	ДЬ

₽ 5	참 정	유 성	음 성	유 상	B 8	B 8	용	B &	Mat Mat	RESULT US-09 Seque Factor Factor GENES APPI FAPI FAPI FAPI FAPI FAPI FAPI FAPI	용 성	B 8	유 성
14	15 13	14 13	1 1	13 12	12	: :	<u> </u>	+	Query Match Best Local S Matches 2357	RESULT 26 IS-09-964-277-20 Sequence 20, Application US/09964277 Patent No. US20020137170A1 GENERAL INFORMATION: APPLICANT: Luche, Ralf M. APPLICANT: Wei, Bo TITLE OF INVENTION: DSP-16 DUAL-SPECI TITLE OF INVENTION: DSP-16 DUAL-SPECI FILE REFERENCE: 200125.434 CURRENT APPLICATION NUMBER: US/09/964 CURRENT FILING DATE: 2001-09-25 NUMBER OF SEQ ID NOS: 22 SOFTWARE: FASTSEQ for Windows Version SEQ ID NO 20 LENGTH: 3332 TYPE: DNA ORGANISM: Homo sapiens	NN	N N	NN
55 5	95	75 35	1415 A 1275 A		295 C	095	.035 /	ທ ປ		277- 10. U INFO NT: FERE FEL APP FIL OF S: S	701	641 640	581
6000 6000 6000	CGAG		CTAT	TGTG	CATC	CAAAA	ACAGO	ATACC	imila	20 App S2000: RMAT Luch Wei VWei VWei INCE: Ince: Ince	ATCT ATCT	GAAA GAAAA	TTCA
6160 	ACGC	CACC	GAGA	AAAG AAAG	GCTA	6CCI 		HGIC	ilarity Conservat	licati 1201371 ION: e, Ral , Bo ION: D ION: D ONOS: 3Q for sapie:	GCAT	ATGG	CAAA CAAA
ATCCC	01.00 01.00 01.00 01.00	IGGAC	AGAAC AGAAC	AAAA AAAA	TCGC	CCAA	GTGA	CAAA	yati	DSP- 125.4 NUMS: 20 127 Wi	TTGAG	AGCIJ HGCIJ	AAAA1 AAAA1
(4) (1) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4	AGTC	HAAGC	ATTA	AGAC	TACA		SAAAA SAAAA	100E	38.8%; 99.9%; Live	116 DI 34 ER: 101-01-01	AGAT	TGGT	TCCC
ecer 	CACC	CAAA CAAA	AGAA AGAA	CTAC	TCAT	GIGI GIGI		ACTT	; Sc ; Pr	99642 UAL-S US/09 9-25 s Ver	CAGC	GTAA	TGTA
#3555 	TGTG	IGAAC 	CCAG	TATAS	GAAGI GAAGI	TCTA	6CCG	TATO	ed. Mis	277 3PECI 3/964	CAATA AATA	AAGCS	AATCI
GSCCCGTGCATCCCGCCAGCGTGCCCAGCGTGCAGCGTGCAGCCGTCGTTAAAGGGIIIIIIIIII	GCGAGACGCCCTCAGTCCACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGAACAAA 	TGCTGCACCTGGAGAAGCCAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAA 	ACTATGAGAAGAAGATTAAGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGC 	TTGTGAAAGAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGG 	CATCGCTATCGCCTACATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGAT 	CAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCA	ACAGCTTTTGTGAGAAAATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAG 	AIR-CETETCARAGECTGRETTATECECGAGTETCATTTCCTGCGTGTGCTGTGAATG	Score 2117; I Pred. No. 0; 0; Mismatches	277 SPECIFICITY 9/964,277 rsion 4.0	ATCTGCATTTGAGAGATCAGCTAATACTTCTCT 	GAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACTCTCTTAAC	TICACAAAAAATTCCCTGTAAATCTGAAATATATATATGTACATACA
2000 	CICIC CICIC	CC.I.C.I.C.I.C.I.C.I.C.I.C.I.C.I.C.I.C.	AGCA:	AAAC AAAC	GGAC	CIGI 	GGAC	GICI	DB); les			GIGG 	TATA
160g1 1	GCTAC GCTAC		TCAG	TTCA	ATGT	TTAG	AAAT HAAT	CAT	0;	PHOSPHATAS	2733 2732	ATCA	TATA:
GCAG	CTCI HULL HOTO	CICIC LCICI	36 11 13 13 13 13 13 13 13 13 13 13 13 13	ATTTT		CIGG 	CAGIZ		Length Indel:	ATAS		1000 1000 1000 1000 1000 1000 1000 100	GTAC
CCGT CCGT	GAGG	GAGG	AAGA	CIGG	GATO	AATCI	AGATI	GCGIC	ength 3 Indels	য		GITG	ATAC
5-15 5-15 5-15 5-15 6-15	CAGC	GIGG	GCAA	GCCA HGCCA	JAAGO	10000 10000	TCAT	31GC	3332;			TTAC	ATAT ATAT
GTTA	AGGA 	ACAG ACAG	ACTC ACTC	ACTO	TTAC	0-10 0-10 0-10 0-10	TGAG	igie Herio				TCTC	ATAT
GAGG	CAAA CAAA	AAAA 	AAGC 		AGAT	6 	AAAG	AATG	Gарв			TTAAC TAAC	
1654 1514	1594 1454	1534 1394	1474 1334	1414 1274	1354 1214	1294 1154	1234 1094	1034				2699	3 2640 1 3 2639
						45	++ +tp-	± − − − − − − − − − − − − − − − − − − −	••			ة ة	0 0

Quer	735 AACAAAAATGGAAGGGCAGATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTTATTC 27
; TY	2675 ATCAACCCAGTTGTTACTCTCTTAACATCTGCAGTTTGAGAGAGTCAGCTAATACTTCTCTC 2734
SOE ; SOE	2615 TATATGTACATACATATATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGG 2674
	2555 TICTATAGACAATITTTTTTTTTTTTTTCACAAAAAAATCCCTGTAAATCTGAAATATA 2614 2415 TICTATAGACAA-TITTTTTTTTCTTGACAAAAAAATCCCTGTAAATCTGAAATATA 2473
GENE GENE APP	2495 CTAGCTTTTCGGGCAGCATGGAAATCATTGAGGTCTCCTGAGAAAGAA
RESULT US-10- ; Sequ	2435 GAGAGAGCATCATGTCAGAGAACAGGTCACGGGAAAGAGCTGGGGAAAAGTGGGCAGTCAGT
Db A	2375 GGCATGAAGAGACCCCTTTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTG 2434
? B \$	2315 AAGTCTATTCTGTGCGCAGGCGGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCT 2374
S B 7	2255 ACGGAGGCAGTGCCAGTTACTCTGCCTACAGCTGCAGCCAGC
S B 8	2195 TGACCAGCAGCTGGTATTTTGCCACAGAGTCCTCACACTTCTACTCTGCCCTCAGCCATCT 2254
S & &	2135 GCCTGGGCCTTAAGGGCTGGCACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCC: 2194
S B 8	2075 ACCACACCAGCTTCCTTTTCGGCCTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTG 2134
S B &	2015 GCACCGCCCAGAGGTCCCTTTTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATT 2074
S & &	1955 CCGCCAGGCCTTCAGACAGCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTG 2014
ב מל ל	1895 AGCAGACTCCCGAAACCAGTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGA 1954
Q	1835 CCACTACTCTGGATGGGACCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGG 1894
\$ B. 6	1775 TGGCAGCATCCTTACATGGCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTT 1834
) D 4	1715 GCAATAAGCTCAAGCGTTCCTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGC
B. B	1655 ACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACA 1714

```
3314
                     3454
                                           3254
                                                               3394
                                                                                     3194
                                                                                                          3334
                                                                                                                                 3134
                                                                                                                                                       3274
                                                                                                                                                                          3074
                                                                                                                                                                                                3214
                                                                                                                                                                                                                     3014
                                                                                                                                                                                                                                          3154
                                                                                                                                                                                                                                                               2954
                                                                                                                                                                                                                                                                                     3094
                                                                                                                                                                                                                                                                                                           2894
                                                                                                                                                                                                                                                                                                                               3034
                                                                                                                                                                                                                                                                                                                                                      2834
                                                                                                                                                                                                                                                                                                                                                                           2974
                                                                                                                                                                                                                                                                                                                                                                                                 2774
                                                                                                                                                                                                                                                                                                                                                                                                                     2914
                                                                                                                                                                                                                                                                                                                                                                                                                                            2714
                                                                                                                                                                                                                                                                                                                                                                                                                                                                2855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2654
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2594
TAAAGATGAACTTGGTTTC 3332
           TARAGATGARCTTGGTTTC 3472
                                        GCTAGTCACACTTTTCAGACCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAG
                                                                                                                                                                                                                                                              ATTAGGGGCCTTGCCAAGGTCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCG
                                                                                                 AGCTGAACCACCAGGAACCTGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGA
                                                                                                                                             ATGGAGATAATTTTTTTTTTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTC
                                                                                                                                                                                                                     CCCTGTTAGGGACAGAGCCTAGTGGTAAATCCAAAGAGAAATGATCCTATCCAAAGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                 ATCCCCTACCATTTT-CACGITGTGCTACTAAGAGATCTCAAATATTAGTCTTTTGTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTGAATTACACATCCTCTTGTTCTTAAAAAAGCAAGTGTCTTTTGGTGTGTTTGGAGGACAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCTGAACCACCAGGAACCTGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGA
                                                                                                                                ATGGAGATAATTTTTTTTTTCTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTC
                                                                                                                                                                                                                                                                                                                                                                           CCCTGTTAGGGACAGAGCCTAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCCCCTACCATTTTCCACGTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTGAATTACACATCCTCTTGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTGGAGGACAAA
                                                                3453
                                           3313
                                                                                                          3393
                                                                                                                                                       3333
                                                                                                                                                                                                3273
                                                                                                                                                                                                                     3073
                                                                                                                                                                                                                                           3213
                                                                                                                                                                                                                                                                                     3153
                                                                                                                                                                                                                                                                                                                                                                           3033
                                                                                                                                                                                                                                                                                                                                                                                                                    2973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2854
                                                                                     3253
                                                                                                                                 3193
                                                                                                                                                                          3133
                                                                                                                                                                                                                                                                 3013
                                                                                                                                                                                                                                                                                                            2953
                                                                                                                                                                                                                                                                                                                                3093
                                                                                                                                                                                                                                                                                                                                                       2893
                                                                                                                                                                                                                                                                                                                                                                                                 2833
                                                                                                                                                                                                                                                                                                                                                                                                                                            2773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2653
```

```
RESULT 27

US-10-104-047-1750
Sequence 1750, Application US/10104047
Sequence 1750, Application US/10104047
Publication No. US20030236392A1
GENERAL INFORMATION: No. US20030236392A1e1 full length cDNA
FILE REFERENCE: H1-A0105
FILE REFERENCE: H1-A0105
CURRENT APPLICATION NUMBER: US/10/104,047
CURRENT PILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE:
NUMBER OF SEQ ID NOS: 4096
SOFTWARE: PAtentin Ver. 2.1
SEQ ID NO 1750
LENGTH: 2558
TYPE: DNA
ORGANIEM: Homo maplens
US-10-104-047-1750
```

밁 ક 밁 S 밁 ફ 밁 ঠ 문 ક 밁 ঠ 뭐 ঠ 밁 ঠ 문 S 밁 र् В ঠ 밁 ð 문 S 吊 ঠ 밁 S 밁 S 문 ક 밁 र्

&	ОУ	Db Qy	Дb	g Q	D Qy	Оγ	d Qy	Qу	dg Qy	94 64	g Q	Qу	ОУ	B &	Db Qy	D Q	D QQ	Besi Mat
3592 TAATATGGCAGAATTTTATAGGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAA 3651	3532 CCAAAGCAGATGTTTTTGCCCTTTCTGCTTCACTGCATGGATACAGTTGGTAAAATGTAA 3591 	3472 CAAGCCAAATGTGAATTTATTTGGGTTGGTAGCAGAGCAGCAGCAGCACCTTCAAATTCTCAG 3531 	3412 AAATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA	3352 CTGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC	3292 TCTTCTCAGCTTTATGAAGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAAC 3351	3232 ACCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGATAATTTTTTTT	3172 TATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGG	3112 GTCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCA 3171	3052 CTGACAGCCGAGGGACACGAGCATCACTCTGCTGGACGGAC	2992 CTAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCAC 3051	2932 TTAGCGCTGAGACTGAGCCAGCTTGGGGGTCAGGTAGGTA	2872 CGTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACC 2931	2812 CTTGTTCTTAAAAAGCAAGTGTCTTTGGTGTTTGGAGGACAAAATCCCCCTACCATTTTCA 2871	2752 AGATGCTAGAATCCCCCCTAGACGGAAGAAAACCATTTTATTCAGTGAATTACACATCCT 2811	2692 TCTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGC 2751 	632 ATATTT	2572 TTTTTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	Best Local Similarity 99.8%; Pred. No. 0; Matches 2398; Conservative 0; Mismatches 6; Indels 0; Gaps 0;
							· · · · · · · · · · · · · · · · · · ·	· <u> </u>					<u>.</u>					
B 8	B 8	B 8	문 왕	당 왕	₽ &	B &	B &	g 94	B 8	망양	B 8	B Q	B 8	₽ \$?	8 B 8	?	} B
4672 TTAGGGCTTCTCTTGGCCATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTA	4612 CTCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCAT	4552 AGTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAG	4492 CATTCTCAAGTTTCACACAGTAGTTTTTGATGTTATGTACACACAC	4432 GAAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGA 	4372 TGCTATGATGGGGTGTAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGG				4132 GGTGGGCCTGGGCGGGTGTTGTCATTGTTCTTTTCCCTTCCTGTAAGTGTCGCTAGTTGCT	4072 TTATCAGCTACAATGTGGGTCCTCTTTTGAAGCCTTAATTCACAACAGCAGCTTTTTGGG		3952 GCGTCCTCAGTCCTCAACCTACAATCACTGTATGGAATCGGTCCTGGCAGCTGAACATAG		1261 ACCATTGAGTTTTGATCAGTTGTAATAGAGTGCAAAGCCATGGCCAAGCTGTTTTTGGA				

838 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG	Qy 718 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT 777	Db 61 AGTGGAACAGAAAAAGTGCTGCTAATTGATAGCCGGCCATTGTGGAAGAATACATCC 120 Qy 658 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 717	VARIVE 0; MI	34.8%; Score 1896; DB 9; Length 1998; 99.9%; Pred. No. 0;	; SEQ ID NO 3 ; LENGTH: 1998 ; TYPE: DNA ; ORGANISM: Homo sapiens	; PRIOR APPLICATION NUMBER: US 60/191/858 ; PRIOR FILING DATE: 2000-03-24 ; NUMBER OF SEQ ID NOS: 10 ; SOPTWARE: PastSEQ for Windows Version 4.0	6,494	7, NOVEL DUAL SPEC	RESULT 28 U8-09-816-494-3 U8-09-813-Application US/09816494	Db 2401 GGAC 2404	2341 GATG	2281 GTGGCTGATTTTTA ACAGGA AAA CTTTTA TTGGGAAAA CCCTCGCGTCTACTAGGGGTGATACA	2221 GGCGAAGGGGTGGCTTGGAGCTGCTAAAACCCCTTGGATGTCTTTAGGTGGGTG	2161 CAGCCTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGT	OV 4732 CAGCCTTTAGTGGTTGACTAGTGTGAGATAATCAGTTCTTGGAATCGAGACTGCCGT 4791
5 6 6 6 5 6 6	. Q	S & 8 8	3 8 8 8	B &	φ γ	B &	p Q	Db Qy	ης γο	β Q	β δ	ρ જ	ρ γ	B 8	DЬ
1918 GATAAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG 1977		1738 TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC 1260 1738 TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC 1797	8 CCCAGCGTGCCCAGCGTGCAGCCGTCGCTTAGAGGACAGCCCGCTGGTACAGGCGCTC	1558 TGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGGCAGCGTG 1617	9	1438 CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT 1497 	1378 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 1437	1318 AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	1258 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG 1317	1198 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCCAAAAAGCCTCCAATGGATGTGTT 1257 	1138 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 1197	1078 CAGCAGAATGGGATTGGTTATGTGTTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT 1137 	1018 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 1077	958 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 1017	361 CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC 420

```
APPLICANT: Chun, Miyoung
APPLICANT: TSAI, FONG-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 2638;
TITLE OF INVENTION: 38692, 46508, 16816, 168
TITLE OF INVENTION: 38692, 46508, 16816, 168
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPI03-0180MNIM
CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 09/215,370
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR FILING DATE: 2000-01-28
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR FILING DATE: 2000-04-26
PRIOR FILING DATE: 2000-05-21
PRIOR FILING DATE: 2000-05-21
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR FILING DATE: 2000-05-26
PRIOR FILING DATE: 2000-05-21
PRIOR FILING DATE: 2000-05-508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 29
US-10-377-072-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 27, Application US/10377072
Publication No. US20040009501A1
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals
APPLICANT: Curtis, Rory A.J.
                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1501
                                                                                                                                                                                                                                                                                                                                                                                                               Curtie, Rory A.J.
Logan, Thomas Joseph
Glucksmann, Maria A.
Meyers, Rachel E.
Williamson, Mark J.
Rudolph-Owen, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCATTGAGGTCTCCTGA 2535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTTCCACCAGCCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                          26335, 50365, 21117,
6, 16839, 49937, 49931
                                                                                                                                                                                                                                                                                                                                           AND 49933 MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ## PRIOR FILING DATE: 2000-05-19
## PRIOR APPLICATION NUMBER: US 09/816,494
## PRIOR FILING DATE: 2001-03-23
## PRIOR PELICATION NUMBER: US 09/815,419
## PRIOR FILING DATE: 2001-03-22
## Remaining Prior Application data removed -
## NUMBER OF SEQ ID NOS: 114
## SOFTWARE: FastSEQ for Windows Version 4.0
## SOFTWARE: FastSEQ for Windows Version 4.0
## SOFTWARE: 1998
## TYPE: DNA
## ORGANISM: Homo Sapiens
## PEATURE:
## NAMEKEY: CDS
## LOCATION: (1)...(1998)
US-10-377-072-27
                                                  Ś
                                                                                                                 Ş
                                                                                                                                                          밁
                                                                                       밁
                                                                                                                                                                                    S
                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                        뭐
                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 1996; Conserv
                                                                                                                         1198
                                                                                                                                                                                              1138
                                                                                                                                                                                                                                                                     1078
                                                                                                                                                                                                                                                                                                                                        1018
                                                                                                                                                          601
                  721
                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                             958
                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ы
                                   CTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCATCGCTATCGCCTACATCATCATCATG
                                                                                                    CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                       ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                   ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                    CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                       CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 1077
                                                                                                                                                                                                                                                                                                                                                                                            ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FastSEQ for Windows Version 4.0
              CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTGCAGGTGGGTTTGCTGAAGTTCTCCTTGTTTCCCTGGCCTCTGTGAAGGAAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                  CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                         ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                34.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 1896;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  removed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ì
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                See File Wrapper or PALM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
```

1257

720

660

1197

1137

540

600

1017

420

957 360 897 300 837 240 777 180 120 657 60

0

```
1681
                                                                                                                                                                                                                                                       2218
                                                                                                                                                                                                                                                                                                                                                                                  1561
                                                                                                                                                                                                                                                                                                                                                                                                                          2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG 1977
AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGCCATCATGTCAGAGAAC 2457
                                                                  GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCCG
                                                                                                                                                                                                                                     ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                           TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCCGAAACCAGTCCT 1917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC 1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                           GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                             ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                              TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                  CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTCCACTGCATCGAAGTGGGAGCGTGGAGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTCCACTGCATCGAAGTGGGAGGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGCAGCGCCCCAGAGGTCCCTTTTA 2037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAACCTGTCCCTGCTGCTCAGAGGGTTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC 1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGACTGGAGCATCAGGGCCAAAGAGCCAAACTCAAGCTGCTGCACCTGGAGAAGCCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT 1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                        CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGTGCCGACTCTGCTACCTCAGAGGCAGGAGCAAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 1437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                               2397
                                                                                                                           1800
                                                                                                                                                                                                                                                                                                                                                                                                                        2157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2097
                                                                                                                                                                                                           1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1500
                                       1860
                                                                                                                                                                 2337
                                                                                                                                                                                                                                                     2277
                                                                                                                                                                                                                                                                                              1680
                                                                                                                                                                                                                                                                                                                                      2217
                                                                                                                                                                                                                                                                                                                                                                                  1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    900
```

ई

몽 ક 밁 8 문 ક 밁 ঠ 밁 5 밁 र् 밁 S 용 र् 밁

밁

5

문

8 8 8 8 8 8

음 중

8 8 8 8 8

```
Remaining Prior Application data removed - Se
NUMBER OF SEQ ID NOS: 114
SOFTWARE: FBSLSEQ for Windows Version 4.0
SEQ ID NO 27
LENGTH: 1998
TYPE: DNA
ORGANISM: Homo Sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (1) ... (1998)
US-10-377-072-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR FILING DATE: 2000-06-29
PRIOR PILING DATE: 2000-11-28
PRIOR PILING DATE: 2000-11-28
PRIOR FILING DATE: 2000-03-07
PRIOR FILING DATE: 2000-03-07
PRIOR FILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: US 69/843,297
PRIOR PILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: US 69/861,801
PRIOR APPLICATION NUMBER: US 69/861,801
PRIOR APPLICATION NUMBER: US 69/861,801
PRIOR APPLICATION NUMBER: US 69/861,801
PRIOR APPLICATION NUMBER: US 69/861,801
PRIOR APPLICATION NUMBER: US 69/861,801
PRIOR APPLICATION NUMBER: US 69/861,801
PRIOR APPLICATION NUMBER: US 69/816,494
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/816,419
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 30

US-10-377-072-27

; Sequence 27, Application US/10377072

; Publication No. US20040157221A9
                                      片
                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                   Query Match
Best Local Similarity
Matches 1996; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Millennium Pharmaceuticals APPLICANT: Curtis, Rory A.J. APPLICANT: Logan, Thomas Joseph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Chun, Miyoung
APPLICANT: T881, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPI03-0180MNIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR FILLING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR FILING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1861
    598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION:
                                                                       ATGGCCCATGAGATGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
  AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCATTGAGGTCTCCTGA 2535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGTCACGGGAAGAGCTGGGGAAAGTGGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 2517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCATTGAGGTCTCCTGA 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Logan, Thomas Joseph
Glucksmann, Maria A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Meyers, Rachel E. Williamson, Mark J. Rudolph-Owen, Laura A.
                                                                                                                                          Conservative
                                                                                                                                                           34.8%;
                                                                                                                                   ; Score 1896; D; Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 See File Wrapper or PALM
                                                                                                                                                                                     DB
                                                                                                                                                                                   18;
                                                                                                                                   2;
                                                                                                                                        Indels
                                                                                                                                                                                   Length
                                                                                                                                   0;
                                                                                                                                     Gaps
                                                                                          597
                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1920
                                                                                                                                        0
```

Db 1141 AGTROGGTTOLACCTTTCCADACAGACTAGAACAACAACTACAACCATTCCTTCC Oy 1799 TCCTCTGAANTCLAMCCATTCCATTTCCAGCAACTAGCACTTCCTTCCATGACTTCCTTC	1498 GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGACACGCCCTCAGTCCACCC 1557		1138 ATCCCCGAGTCTCATTTCCTGCGTGTGACTGACTGACAGAAAATTTTTG 1197 [958 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 1017	778 TGCAGTGAGAAGGTTGTACGATCAAAAGCTCCCAAGATGTTGCCTCTCCTCTCA 837	AGTGGAACGGAAA CACATTTTGGAAG [
	RESULT 31 US-10-094-749-673 Sequence 673, Applic. Publication No. US20 GENERAL INFORMATION: APPLICANT: ISOGAI, APPLICANT: SUGIYAM APPLICANT: OTSUKI, APPLICANT: WAKAMAT: APPLICANT: WAKAMAT: APPLICANT: SATO, H APPLICANT: YAWAMOTI APPLICANT: ISONO, APPLICANT: HIO, YUI APPLICANT: HIO, YUI	2398 1861 2458 1921 2518	1681 2278 1741 2338	2038 TCTCC 2038 TCTCC 2098 CTTTC 1501 TCTCC 2098 CTTTC 1561 CTTTC 2158 TCGGA 1621 TCGGA	1321 1918 1381 1978 1441	1141 1738 1201 1798 1261

음 성

유왕

8 8 8 8 8

B 8

8 8

뭐

8 8 8

음 성

뫄

용. 성

8 B

```
APPLICANT: NAGAI, KAORU
APPLICANT: INIB, RVITARO
APPLICANT: TAMECHIKA, ICHIRO
APPLICANT: TAMECHIKA, TSUTOMU
APPLICANT: SEKI, NAOHIKO
APPLICANT: OTSUKA, MOTOYUKI
APPLICANT: NAGAHARI, KENJI
APPLICANT: NAGAHARI, KENJI
APPLICANT: NAGHARI, KENJI
APPLICANT: NAGHARI, KENJI
APPLICANT: NAGHARI, KENJI
APPLICANT: NAGHARI, KENJI
CURRENT APPLICATION NUMBER: US/10/094,749
CURRENT APPLICATION NUMBER: 60/350,435
PRIOR APPLICATION NUMBER: JP 2001-328381
PRIOR APPLICATION NUMBER: JP 2001-328381
PRIOR APPLICATION NUMBER: JP 2001-328381
PRIOR APPLICATION NUMBER: JP 2001-328381
PRIOR APPLICATION NUMBER: JP 2001-328381
PRIOR APPLICATION SATE: 2001-09-14
NUMBER: OF SEQ ID NOS: 3381
SOFTWARE: PACENTIN Ver. 2.1
SEQ ID NO 673
LENGTH: 2102
TYPE: DNA
ORGANISM: Homo sapiens
US-10-094-749-673
               음 중
                                                                밁
                                                                                      ક
                                                                                                              В
                                                                                                                                      ঠ
                                                                                                                                                                     밁
                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                  र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    श
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                          1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2089; Conservative
                                                                   541
                                                                                                                       481
                                                                                                                                                                                                    903
                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                         843
                                                                                                                                                                                                                                                                                   301
               601
                                                                                                                                              963
                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                             783
                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                  723
                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                       663
                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         483 TACATCATCGTGGCAAATTAAAGAAGAGGGGGGGAAAAGAGGGACTTATTGTTGTCATGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                        GAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATCCC 1142
                                                                                                                                                                                                                                                                                                      TCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAGCA 1082
                                                                                                                                     AGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCGAAT 1022
                                                                                                                                                                                          AGGTGGGTTTGCTGAAGGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCACTCT
                                                                                                                                                                                                                                                                                                                                                                                                            TTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCCCACAT
                                                                                                                       AGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCTAAT
                                                                                                                                                                            AGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCCACTCT
                                                                                                                                                                                                                                                TTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGC
                                                                                                                                                                                                                                                                                   TCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCT
                                                                                                                                                                                                                                                                                                                                                                TTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAAAGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAAGAGGACTTATTGTTGTCATGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 1889; DB
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                   CTCTCTTCAGACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2102;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>,</u>
                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                            480
                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                         902
                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                           842
                                                                                                                                                                                                                                                                                                                                                                  782
                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                      722
                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
S
                     밁
                                                 S
                                                                             문
                                                                                                  δ
                                                                                                                                밁
                                                                                                                                                        S
                                                                                                                                                                                      밁
                                                                                                                                                                                                         S
                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
 2223
                            1681
                                                                               1621
                                                                                                         2103
                                                                                                                                   1561
                                                                                                                                                            2043
                                                                                                                                                                                       1501
                                                                                                                                                                                                                1983
                                                                                                                                                                                                                                            1441
                                                                                                                                                                                                                                                                     1923
                                                                                                                                                                                                                                                                                               1381
                                                                                                                                                                                                                                                                                                                         1863
                                                                                                                                                                                                                                                                                                                                                  1321
                                                                                                                                                                                                                                                                                                                                                                              1803
                                                                                                                                                                                                                                                                                                                                                                                                           1261
                                                                                                                                                                                                                                                                                                                                                                                                                                  1743
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
 GTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCTGCCTA 2282
                                                                                                                                  ACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGCCTTTC
                                                                                                                                                                                                                                                            GGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAAGAGCAA
                                                                                                                                                                                                                                                                                                              ATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCTGATAA 1922
                                                                                                                                                                                                                                                                                                                                                                                                                         GGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTCTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTGCCGTG
                                        TATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCCACAGA
                                                                                 CACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCACTCGGA
                                                                                               CACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTTGGCACTCGGA
                                                                                                                                                                                                             GCGATTGCATTCGGTCAGAACCAGCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTATCTCC
                                                                                                                                                                                                                                                                                                                                                                ATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAACAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGGACAGCCCGCTGGTACAGGCGCTCAGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTGCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCCTGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCCTATCGCCTACATCATGAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTTGGACAAATCAGTAGAGTTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTTTCTAGT
                            TATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCCACAGA
                                                                                                                                                                                                                                                                                                ATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCTGATAA
                                                                                                                                                                                                                                                                                                                                                    ATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAACAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                        GGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTCTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTCTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTCAGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGACTOTGOTACOTOAGAGGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTGCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCCTGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAACCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCACTGTTTAGCTGGGATCTCCCGCCTCCGCCATCGCTATCGCCTACATCATGAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTTGGACAAATCAGTAGATTTCATTGAGAAAAGCCAAAAAGCCTCCAATGGATGTTCTAGT
                          1740
                                                     2222
                                                                               1680
                                                                                                                                                                                                                                                                     1982
                                                                                                                                                                                                                                                                                                                                                                              1862
                                                                                                                                   1620
                                                                                                                                                                                        1560
                                                                                                                                                                                                                2042
                                                                                                                                                                                                                                            1500
                                                                                                                                                                                                                                                                                                1440
                                                                                                                                                                                                                                                                                                                                                    1380
                                                                                                                                                                                                                                                                                                                                                                                                                                    1802
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1442
                                                                                                                                                                                                                                                                                                                                                                                                           1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        720
```

DB 68	Db Qq	B 8	B &	B &	B 8	B &	Query Best Match	; TYI ; TYI ; ORC US-10-1	; CURI ; NUMI ; SOFT	; APPI ; TITI ; FILI	Seque Publ	RESULT 32	g &	유 성	B &	?	Db Db	8 B
2054 GTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGCCTTTCCACCAGCGAGC 2113	1994 CGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTATCTCCACTGCATCGAA 2053	1934 GCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAGAGCGATTGCATT 1993 	1874 CCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCTGATAAGGAGGAAGCCA 1933 	1814 CTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAACAAGCTATGCCAGTTCT 1873 	1754 CAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTCTCCTCATCAGAAGATG 1813	1694 CCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTCTCTGGATATCAAAT 1753 	Query Match 27.3%; Score 1486; DB 17; Length 1916; Best Local Similarity 99.8%; Pred. No. 0; Matches 1776; Conservative 0; Mismatches 1; Indels 2; Gaps 2;	TYPE: DNA ORGANISM: Homo sapiens 10-108-260A-2429	CURRENT FILING DATE: 2002-03-27 NUMBER OF SEQ ID NOS: 5458 SOFTWARE: Patentin Ver. 2.1 SEQ ID NO 2429	LICANT: HELIX RESEARCH INSTITUTE LE OF INVENTION: No. US20040005560Alel full length cDNA E REFERENCE: H1-A0106 RENT APPLICATION NUMBER: US/10/108,260A	*10-108-260A-2429 Sequence 2429, Application US/10108260A Publication No. US20040005560A1 GENERAL INFORMATION:		2575	2463 ACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTTTAGCTTTTTCGGGCAGCATGGAAATCAT 2522 	2903 GIIIAWANGCAGAAGCIGCAAAINGAAINTIGGAGAGCATCANGTCAGAGAACAGGTC 2462 	861	801 CAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGGCAGAA	
D Qy	D Q	dg Qy) B (2	}	, B &	B &	D Q	D 40	ОУ	Qy	Оу	B &	₽ 4	δ <u>β</u>	δ B	S B	Qy	, Q
3134 TACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCATATCTGGTAGCCCATTTTCTAG 3193	3074 ATCACTCTGCTGGACGACCATTAGGGGCCTTGCCAAGGTCTACCTTAGAGCAAACCCAG 3133 	3014 TGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACCTGACAGCCGAGGGACACGAGC 3073	99 4	94 AAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCTTAGGCGCTGAGACTGAGCCAGC	34 79	2774 CGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTCTTGTTCTTAAAAAAGCAAGTG 2833 			2594 TCCCTGTAAATCTGAAATATATATATGTACATACATATATAT	2534 GAGAAGAAGACACTTGTGACTTCTATAGACAATTTTTTTT	2474 TGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAAATCATTGAGGTCTCCT 2533	2414 GAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAACAGGTCACGGGAAGAGC 2473	800 GAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAAAAGCAGTTTAAAAGCA 859		680 TCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCTGCCCTACAGCTGCAGCC 739 2294 AGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGGCAGGAGCCAAGTGACA 2353	620 CCCAGACCTCTACCCCTTACCAÁCAÁCTGGTATTTTGCCACAÁGAGTCCTCACACT 679 2234 TCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCTGCCTACAGCTGCAGCC 2293		2114 AGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCACTCGGATATCTTGGCCC 2173

```
US-10-072-012-257

Sequence 257, Application US/10072012

Publication No. US20040033493A1

GENERAL IMPORMATION:

APPLICANT: Tebrinev, Velizar

APPLICANT: Spytek, Kimberly

APPLICANT: Spytek, Kimberly

APPLICANT: Spytek, Kimberly

APPLICANT: Patturajan, Meera

APPLICANT: Spytek, Kimberly

APPLICANT: Spytek, Kimberly

APPLICANT: Spytek, Kimberly

APPLICANT: Spytek, Kimberly

APPLICANT: Spytek, Kimberly

APPLICANT: Spytek, Kimberly

APPLICANT: Spytek, Kimberly

APPLICANT: Spytek, Kimberly

APPLICANT: Anderson, David W.

APPLICANT: Rastelli, Luca

APPLICANT: Anderson, David W.

APPLICANT: Anderson, David W.

APPLICANT: Anderson, David W.

APPLICANT: Anderson, David W.

APPLICANT: Anderson, David W.

APPLICANT: Gelach, Vlactie

APPLICANT: Gusev, Vladdimir Y.

APPLICANT: Pana, Carol B. A

APPLICANT: Possee, William M.

APPLICANT: Alsobrook II, John P.

APPLICANT: Alsobrook II, John P.

APPLICANT: Alsobrook II, John P.

APPLICANT: Alsobrook II, John P.

APPLICANT: Burges, Catherine E.

ITILS OF INVENTION INVERS: US/10/072,012

CURRENT PILING DATE: 2001-01-31

PRIOR APPLICATION NUMBER: US/10/072,012

PRIOR APPLICATION NUMBER: 60/265,102

PRIOR APPLICATION NUMBER: 60/265,514

PRIOR APPLICATION NUMBER: 60/265,514

PRIOR APPLICATION NUMBER: 60/265,514

PRIOR APPLICATION NUMBER: 60/265,514

PRIOR APPLICATION NUMBER: 60/265,412

PRIOR FILING DATE: 2001-01-31

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      श
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGGATTGTCAATCCTTTAAATAAAGATGAACTTGGTTTC 3472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACCTGGCAACATCACGATTTAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCATTGTGAATAGGTAGGTAGTCACACTTTTCAGACCAATTCAAACTGTCTATGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAAGGTTGGGAGGCTAACGAGTCTACCTCCCTCTTTGTAAATCAAAGAATTGTTTAAAAT 3433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCATTGTGAATAGGTAGGTAGCTAGTCACACTTTTCAGACCAATTCAAACTGTCTATGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 1391
; SOFTWARE: PatentIN Ver. 2.1
; SEQ ID NO 257
; SEQ ID NO 257
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-072-012-257
                                                      S
                                                                                                밁
                                                                                                                       5
                                                                                                                                                             g
                                                                                                                                                                                                 S
                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                            片
                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local S
Matches 2068
                                                                                                                                                                                                            1198
                                                                                                                                                                                                                                                                                  1138
                                                                                                                                                                                                                                                                                                                                                          1078
                                                                                                                                                                                                                                                                                                                                                                                                                              1018
                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                  781
                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2068;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAAGACGACTTATTGTTC
                                               CAGCAGAATGGGATTGGTTATGTGTTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                     CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACAAAGTGTTAAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCATTACATCGTGGCAAATTAAAGAAGGGGGAAAAGAGGACTTATTGTTGTC
                                                                                                                     CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCCTATCGCCTACATCATC
                                                                                                                                                                                             CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                   ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                      CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                            CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTGCAGGTGGGTTTGCCTGAGTTCTCTCGTTGTTTCCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGGCCCATGAGATGATTGGAAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                  CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                          CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                              ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACTOTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTIGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24.2%;
llarity 99.4%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 1318; DI
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ω
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      897
                                                                                                  840
                                                                                                                                      1317
                                                                                                                                                                                                              1257
                                                                                                                                                                                                                                                                                                                                                          1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                          780
                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    657
```

```
1732
                                                                                                                                                                                                                                                                                                       2218
                                                                                                                                                                                                                                                                                                                                                                                                                   1612
                                                                                                                                                                                                                                                                                                                                                                                                                                                     2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  961
AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                  AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                          CAGAAGCCAAGTGACAGAGCTGACTCGCGGGGGGGGGGTGGATGAAGAGAGCCCCTTTGAA
                                                                                                                                                                                 GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                          GCCTACAGCTGCAGCTAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                   TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                            ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                    TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                           CTTTCCACCAGCAGCACCACCACGAAGTCTGCTGGCCTTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC 2157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCACCAGCTTCCTTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGGAAACCAGTCCT 1917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTGCCGACTCTGCTACCTCAGAGGCAGCAGCAGCAAAGGCCCGTGCATCCCGCCAGCGTG 1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    - CCAGCGTACCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGACGCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT 1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCG------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATATCTCCAĂĂCTTCAĂTTTTCTGGGCCĂĂCTCCTGGĂCTĂTGĂGAĂGAĞĞATTAAGAAC
   2517
                                                                         2457
                                                                                                             1911
                                                                                                                                                2397
                                                                                                                                                                                     1851
                                                                                                                                                                                                                                                            1791
                                                                                                                                                                                                                                                                                                                                    1731
                                      1971
                                                                                                                                                                                                                        2337
                                                                                                                                                                                                                                                                                               2277
                                                                                                                                                                                                                                                                                                                                                                        2217
                                                                                                                                                                                                                                                                                                                                                                                                             1671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1437
```

ঠ 8 Ś 밁 S 밁 Ś 밁 8 밁 8 밁 Ś 밁 ঠ 밁 Ş 밁 Ś

밁

뮍 Ş 밁 Ś 멍 S 밁 8 뫄 Ś В Ş 밁 S 밁 8

B 17;

2200;

0

Indels Length

0,

Gaps

```
; LENGTH: 2200
; TYPE: DNA
; ORGANISM: Homo :
US-10-072-012-255
                                                                                                                                                                             Remaining Prior Application de NUMBER OF SEQ ID NOS: 1391 SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 255 LENGTH: 2200
                                                                                                                                                                                                                                                                                                                    APPLICANT: FUITA, CATCH E. A
APPLICANT: GROSSE, William M.
APPLICANT: Alsobrook II, John P.
APPLICANT: Lepley, Denise M.
APPLICANT: Lepley, Denise M.
APPLICANT: Burges, Catherine E.
APPLICANT: Burges, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Enc
FILE REFERENCE: 21402-258
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/267,057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Sequence 255, Application US/10
; Publication No. US20040033493A1
; GENERAL INFORMATION:
; APPLICANT: Tchernev, Velizar
; APPLICANT: Spytek, Kimberly
; APPLICANT: Zerhusen, Bryan
; APPLICANT: Patturajan, Meera
; APPLICANT: Shimkets, Richard
; APPLICANT: Li, Li
; NELICANT: Li, Li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 34
US-10-072-012-255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
Query Match 22.5%; Score 1225; Best Local Similarity 100.0%; Pred. No. 0; Matches 1225; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Anderson, David W.
Rastelli, Luca
Miller, Charles E.
Gerlach, Valerie
Taupier Jr, Raymond o
Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Li, Li
Gangolli, Esha
Padigaru, Muralidhara
Padigaru, David W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCATTGAGGTCTCCTGAGAAGAAGACACTTGTGACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCATTGAGGTCTCCTGAGAAGAAGACACTTGTGACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patturajan, Meera
Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/10072012
D. US20040033493A1
                                                                                                                                                                                                                                                                                                   data removed -
                                                                                                                                                                                                                                                                                                See File Wrapper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Same
                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2031
```

음 성

```
1939
                                                                                               1879
                                                                                                                                                               1819
                                                                                                                                                                                                                                                             2191
                                                                                                                                                                                                                                                                                               1699
                                                                                                                                                                                                                                                                                                                                                              1639
                                                                                                                                                                                                                                                                                                                                                                                             2071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1471
2431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  919
                                                                                                                                                                                                                                                                                                                                                             AATTACCACACCAGCTTCCTTTTCGGCCTTTCCACCAGCAGCAGCACCACCAGCAGCACCTCACGAAGTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCATGGCAGCATCCTTACATGGCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAA 1830
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCCTGACCAGCAGCTGGTATTTTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCC
                                                                                                                                                                                                                                                                                                                   GCTGGCCTGGGCCTTAAGGGCTGGCACTCGGATATCTTGGCCCCCCAGACCTCTACCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGACCGCCAGGCCTTCAGACAGCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCGGAGCAGACTCCCGAAAACCAGTCCTGATAAGGAGGAAGCCAGCATCCCCCAAGAAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTTCCACTACTCTGGATGGGACCAACAAGCTATGCCAGTTCTCCCCCTGTTCAGGAACTA 1890
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACAGCAATAAGCTCAAGCGTTCCTTCTCTCTGGATATCAAATCAGTTTTCATATTCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGGACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAAGCGAGACGCCCCTCAGTCCCACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGAGCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGATTTGTGAAAGAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTC
TTTGGAGAGAGCATCATGTCAGAGAACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGT
                                                 AGCTGGCATGAAGAGAGCCCCTTTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAA
                                                                                               GACCAAGTCTATTCTGTGCGCAGGCGGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGG
                                                                                                                GACCAAGTCTATTCTGTGCGCAGGCGGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGG
                                                                                                                                                                AGTGGCACCGCCAGAGGTCCCCTTTTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGACCGCCAGGCCTTCAGACAGCCAGAGCGAGTTGCATTCGGTCAGAACCAGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTTCCACTACTCTGGATGGGACCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACAGCAATAAGCTCAAGCGTTCCTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGGACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAAGCGAGACGCCCTCAGTCCACCCTGTGCCGACTCTGCCTCAGAGGCAGCAGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGCTGCTGCACCTGGAGAAGCCAAATGAACCTGTCCCTGCTCTCAGAGGGTGGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGCTGCTGCACCTGGAGAAGCCAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAG
                              AGCTGGCATGAAGAGAGCCCCTTTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAA
                                                                                              1938
2490
                                                             2430
                                                                                                                            2370
                                                                                                                                                             1878
                                                                                                                                                                                                                              1818
                                                                                                                                                                                                                                                                                               1758
                                                                                                                                                                                                                                                                                                                                                                                                                                                              2070
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1950
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1770
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1710
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1590
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1470
                              1998
                                                                                                                                                                                                                                                             2250
                                                                                                                                                                                                                                                                                                                            2190
                                                                                                                                                                                                                                                                                                                                                              1698
                                                                                                                                                                                                                                                                                                                                                                                             2130
                                                                                                                                                                                                                                                                                                                                                                                                                               1638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1410
```

음 성 음

중 음 중 음

중 유

8 8 8 8 8 8 8 8 8

중 음 중

음 성 음

ঠ 🖁 ঠ

8 8 8 8

밁

8 8 8

```
APPLICANT: Van 't Veer, Laura
APPLICANT: Van 't Veer, Marc
APPLICANT: Van de Vijver, Marc
APPLICANT: Bernards, Rene
ITITLE OF INVENTION: Diagnosis and Prognosis of Bre
FILE REFERENCE: 9301-175-999
CURRENT APPLICATION NUMBER: US/10/172,118
CURRENT FILING DATE: 2002-06-14
PRIOR APPLICATION NUMBER: 60/380,770
PRIOR APPLICATION NUMBER: 60/380,770
PRIOR FILING DATE: 2002-05-14
NUMBER OF SEQ ID NOS: 2699
SEQ ID NO 2599
SEQ ID NO 2599
LENGTH: 940
Type: DNA
ORGANISM: Homo sapiens
PUBLICATION INFORMATION:
DATABASE ENTRY DATE: 2001-06-18
US-10-172-118-2599
                                                                        S
                                                                                                                              S
                                                                                                                                                             문
                                                                                                                                                                                  S
                                                                                                                                                                                                                 片
                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 35

US-10-172-118-2599/c

; Sequence 2599, Application US/10172118

; Publication No. US20030224374A1

; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                 ક
                                                   В
                                                                                                        밁
                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Dai, Hongyue
APPLICANT: He, Yudong
APPLICANT: Linsley, Peter
APPLICANT: Mao, Mao
APPLICANT: Roberts, Chris
APPLICANT: Van 't Veer, Lau
APPLICANT: Van de Vijver, M
                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 100.0%;
Matches 940; Conservative
                                                                                                                                   4446
                                                                                                                                                                                                                                              4326
                                                                                                                                                                                                                                                                                                                                                        4206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1999
                          4566
                                                                               4506
                                                                                                                                                                                         4386
                                                                                                                                                                                                                                                                                                  4266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2491
                                                     640
                                                                                                                                                                760
                                                                                                                                                                                                                    820
                                                                                                                                                                                                                                                                          880
                                                                                                                                                                                                                                                                                                                               940
                                                                                                          700
AGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGA 4625
                                                                                                                                                                                                                                                                                                                             ACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTC
                                                                                                                                                                              GTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCA
                                                                                                                                                                                                                                     GGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGTGCTATGATGGGGT
                                                                                                                                                                                                                                                                                          TATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGACCGACTTGGTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTGGAGAGAGCATCATGTCAGAGAACAGGTCACGGGAAAGCTGGGGAAAGTGGGCAGT
                                                                      ACACAGTAGTTTTTGATGTTATGTACACACACACAAATGTGTAACAGTTCACCACTTCC
                                                                                                                                                                GTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCA
                                                                                                                                                                                                                      GGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGTGCTATGATGGGGT
                                                                                                                                                                                                                                                                          TATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACAGACCGACTTGGTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACGATTTGAGTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTC
                                                                                                                                                                                                                                                                                                                                                                                   17.2%; Score 940; DE 100.0%; Pred. No. 0; ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2575
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2143
                                                                                                                                                                                                                                                                                                                                                                                                                DB
                                                                                                                                                                                                                                                                                                                                                                                                              17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Breast
                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patients
                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                4565
                                                                                                                                     4505
                                                                                                                                                                                           4445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2550
                                                       581
                                                                                                                                                                                                                                               4385
                                                                                                                                                                                                                                                                                                     4325
                                                                                                                                                                                                                                                                                                                                881
                                                                                                           641
                                                                                                                                                                701
                                                                                                                                                                                                                      761
                                                                                                                                                                                                                                                                          821
                                                                                                                                                                                                                                                                                                                                                           4265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2058
                                                                                                                                                                                                                                                                                                                                                                                     0
```

```
GENERAL INFORMATION OF SECULDARY: Dai, Hongyue

APPLICANT: He, Yudong

APPLICANT: Linsley, Peter S.

APPLICANT: Mao, Mao

APPLICANT: Mao, Mao

APPLICANT: Mao, Mao

APPLICANT: Wan 't Veer, Laura Johanna

APPLICANT: Van 't Veer, Marc J.

APPLICANT: Van de Vijver, Marc J.

CURRENT FILLNG DATE: 2001-165-199

CURRENT APPLICATION NUMBER: 60/298,918

PRIOR APPLICATION NUMBER: 60/298,918

PRIOR APPLICATION NUMBER: 60/380,710

PRIOR FILING DATE: 2002-05-14

PRIOR APPLICATION NUMBER: 10/172,118

PRIOR APPLICATION NUMBER: 10/172,118

PRIOR APPLICATION NUMBER: 10/172,118

PRIOR FILING DATE: 2002-06-14

INUMBER OF SEQ ID NOS: 2699

LENGTH: 940

TYPE: DNA

ORGANISM: Homo sapiens

US-10-342-887-2599
                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 36
US-10-342-887-2599/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뭥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                           Query Match 17.2%; Score 940; DE Best Local Similarity 100.0%; Pred. No. 0; Matches 940; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2599, Application US/10342887 Publication No. US20040058340A1 GENERAL INFORMATION:
     4206 GTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTGACTTCATGTTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATGATTAAATAAAATCAAAACTGGTACCTGTTTATACAT 5145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTAGATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTTCTTTTGAAGTAAGGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGAGCAAAACTAGAGCTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCAGCATGTAATTGGGGAAACCCTCGCGTCTACTAGGGGTGATACAGATGGTGATTTTAA 4925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCAGCATGTAATTGGGGAAACCCTCGCGTCTACTAGGGGTGATACAGATGGTGATTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTAGATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTTTGAAGTAAGGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGAGCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCATGGTCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCCATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGGCTTCTCTT
                                                                                                                                                                                                                                                                                유
                                                                  17;
                                                                                                                                                                                                                                                                                Breast Cancer Patients
                                           0;
                                                                  Length
                                           Indels
                                           0,
                                          Gaps
                   4265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         461
                                          0,
US-10-027-632-144266/c

| Sequence 144266, Application US/10027632
| Publication No. US20020198371A1
| GENERAL INFORMATION:
| APPLICANT: Wang, David G.
| TITLE OF INVENTION: Identification and Mapping of Single |
| TITLE OF INVENTION: Polymorphisms in the Human Genome
| FILE REFERENCE: 108827.129
| CURRENT APPLICATION NUMBER: US/10/027,632
                                                                                                                                                    밁
                                                                                                                                                                        S
                                                                                                                                                                                                     片
                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                             5106
                                                                                                                                                                                                                           5046
                                                                                                                                                                                                                                                                                                                           4926
                                                                                                                                                                                                                                                                            4986
                                                                                                                                                                                                                                                                                                                                                                            4866
                                                                                                                                                                                                                                                                                                                                                                                                                           4806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4326
                                                                                                                                                                                                     100
                                                                                                                                                                                                                                                    160
                                                                                                                                                                                                                                                                                                                                                                                                   340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4266
                                                                                                                                                                                                                                                                                                   220
                                                                                                                                                                                                                                                                                                                                                    280
                                                                                                                                                                                                                                                                                                                                                                                                                                                   400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 820
                                                                                                                                                    40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                940
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACGATTI
```

```
AATGATTAAATAAAATCAAAACTGGTACCTGTTTATACAT 5145
                                                                                                               AGAGCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAG 4985
                                                                                   TTAGATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTTTGAAGTAAGGCCAG
                                                                                                                                                                                                                                                                                                                                                                                  TCAGCATGTAATTGGGGAAACCCTCGCGTCTACTAGGGGGTGATACAGATGGTGATTTTAA 4925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGC
                                                                                                                                                                         TTAGATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTTTGAAGTAAGGCCAG
                                                                                                                                                                                                                                                                 AGAGCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAG
                                                                                                                                                                                                                                                                                                                                                      TCAGCATGTAATTGGGGAAACCCTCGCGTCTACTAGGGGGTGATACAGATGGTGATTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                            GGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGCCATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACACAGTAGTTTTTGATGTTATGTACACACACACAAATGTGTAACAGTTCACCACTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACACAGTAGTTTTTGATGTTATGTACACACACACAAATGTGTAACAGTTCACCACTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGTGCTATGATGAGGGT 4385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCCATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ĠŦĀĀĀĠŦĠĀĀĠĠĊĀĠĀĀĠĀĠĠĠŦĊĀĠĊĊĠĊĀŦŦĠŦŦĀŤĠĀŦĀĊŦĠĠŖĀĀĀĠŦĠĊŦĠĠŦĊĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGACCGACTTGGTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGACCGACTTGGTTAT 4325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTGACTTCATGTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGTGCTATGATGGGGT
                                                                                                                                                                                                                     5045
                                                                                     41
                                                                                                                                                                           101
                                                                                                                                                                                                                                                              161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4805
                                                                                                                                                                                                                                                                                                                                                      221
                                                                                                                                                                                                                                                                                                                                                                                                                                              281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        881
```

Nucleotide

```
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR FILING DATE: 2000-07-12
PRIOR FILING DATE: 2000-04-20
PRIOR APPLICATION NUMBER: US 60/198,676
PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR FILING DATE: 1999-11-23
PRIOR APPLICATION NUMBER: US 60/156,358
PRIOR FILING DATE: 1999-09-28
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR PILING DATE: 1999-08-09
NUMBER OF SEQ ID NOS: 325720
SOPTWARE: PRESECO for Windows Version 4.0
SEQ ID NO 144266
                                                 문
                                                                       S
                                                                                                                밁
                                                                                                                                      र्
                                                                                                                                                                       밁
                                                                                                                                                                                                            र्
                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                 몽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  윰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ई
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: DNA
; ORGANISM: Human
US-10-027-632-144266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT FILING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INT FILING DATE: 2002-04-30
APPLICATION NUMBER: US 60/218,006
FILING DATE: 2000-07-12
APPLICATION NUMBER: US 60/198,676
FILING DATE: 2000-04-20
                  5024
                                                                                                                                               4904
                                                                                                                                                                                                                4844
                                                                                                                                                                                                                                                                                 4784
                                                                                                                                                                                                                                                                                                                                                                                                               4664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4544
                                                                                4964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4364 AAATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGGTCAGCCGCATTGTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4424 GATACTGGGAAAGTGCTGGTCAACGATTTGAGTTTATTTTAGATATACATTGAAATCTT
                                                                                                                                                                                                                                                                                                                 338
                                                                                                                                                                                                                                                                                                                                                                                398
                                                                                                                158
                                                                                                                                                                               218
                                                                                                                                                                                                                                                  278
                                                                                                                                                                                                                                                                                                                                                                                                                                                 458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  681;
                                                 98
TGTTCTTTTGAAGTAAGGCCAG 5045
                                                                                                                                     GTGATACAGATGGTGATTTTAAAGAGCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAA
                                                                                                                                                                                                         GTGGGGTGGTGGCTGGCTCTCTTCAGCATGTAATTGGGGAAACCCTCGCGTCTACTAGGG
                                                                                                                                                                                                                                                                                                                                  ACATCCTACAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAG
                                                                                                                                                                                                                                                                                                                                                                                                   AGCAGTAGCTCCTTGCTAACGATGTTTCAGGAGGTTTTGGGGCACTTGGTTTTAATGAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGTGTAACAGTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTTAAGAAAGGAA 4603
                                                                    ATGATTTAGGACATGTGTAAAGTTAGATGGAAAGACTGTAAATGTTTAATATGAATATATG
                                                                                                              GTGATACAGATGGTGATTTTAAAGAGCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAA
                                                                                                                                                                               GTGGGGTGGCTGGCTCTCTTCAGCATGTAATTGGGGAAACCCTCGCGTCTACTAGGG
                                                                                                                                                                                                                                                ACTGCCGTGGCGAAGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAG
                                                                                                                                                                                                                                                                               ACTGCCGTGGCGAAGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAG
                                                                                                                                                                                                                                                                                                                 ACATCCTACAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAG
                                                                                                                                                                                                                                                                                                                                                                               AGCAGTAGCTCCTTGCTAACGATGTTTCAGGAGGTTTGGGGGSACTTGGTTTTAATGAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATACTGGGAAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ANATAATGTGCTATGATGGGGTGTAAAGTGAAGGCCAGAAGAGGGTCAGCCGCATTGTTAT
                                                   ATGATTTAGGA CATGTGTAAAGTTAGATGGAAAGACTGTAAATGTTTAATATGAATATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTGTAACAGTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                11.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>;</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 631;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 13; Length 860;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                               4963
                                                                                                                                                                                                                4903
                                                                                5023
                                                                                                                                                                               159
                                                                                                                                                                                                                                                                               4843
                                                                                                                                                                                                                                                                                                                                                4783
                                                                                                                                                                                                                                                                                                                                                                                                               4723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4483
                                                 39
                                                                                                                99
                                                                                                                                                                                                                                                219
                                                                                                                                                                                                                                                                                                               279
                                                                                                                                                                                                                                                                                                                                                                               339
                                                                                                                                                                                                                                                                                                                                                                                                                                                399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
```

```
Sequence 144266, Application US/10027632

Publication No. US20030204075A9

GENERAL INFORMATION:

APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single Nucleotide

TITLE OF INVENTION: Polymorphisms in the Human Genome

FILE REFERENCE: 108827.129

CURRENT APPLICATION NUMBER: US/10/027,632

CURRENT FILING DATE: 2002-04-30

PRIOR APPLICATION NUMBER: US 60/18,676

PRIOR FILING DATE: 2000-07-12

PRIOR FILING DATE: 2000-03-29

PRIOR APPLICATION NUMBER: US 60/198,676

PRIOR FILING DATE: 2000-03-29

PRIOR APPLICATION NUMBER: US 60/193,483

PRIOR APPLICATION NUMBER: US 60/193,483

PRIOR APPLICATION NUMBER: US 60/193,483

PRIOR APPLICATION NUMBER: US 60/185,218

PRIOR APPLICATION NUMBER: US 60/185,358

PRIOR APPLICATION NUMBER: US 60/167,363

PRIOR APPLICATION NUMBER: US 60/167,363

PRIOR APPLICATION NUMBER: US 60/167,363

PRIOR APPLICATION NUMBER: US 60/167,363

PRIOR APPLICATION NUMBER: US 60/167,363

PRIOR FILING DATE: 1999-09-28

PRIOR APPLICATION NUMBER: US 60/146,002
                                                                     δ
                                                                                                              밁
                                                                                                                                        S
                                                                                                                                                                                       밁
                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                 片
                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-027-632-144266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-027-632-144266/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 325720
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 144266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 681;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: US 60/146,002 PRIOR FILING DATE: 1999-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 860
                                                                         4784
                                                                                                                                                                                                                             4664
                                                                                                                                                                                                                                                                                                      4604
4844 GTGGGGTGGTGGCTCTCTTCAGCATGTAATTGGGGAAACCCTCGCGTCTACTAGGG 4903
                                                                                                                                                    4724
                                                                                                                                                                                                                                                                                                                                                                               4544
                                                                                                                                                                                                                                                                                                                                                                                                                                               4424 GATACTGGGAAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAAATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4364 AAATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGGTCAGCCGCATTGTTAT
                                     278
                                                                                                              338
                                                                                                                                                                                       398
                                                                                                                                                                                                                                                                   458
                                                                                                                                                                                                                                                                                                                                              518
                                                                                                                                                                                                                                                                                                                                                                                                                       578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                               TGTGTAACAGTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAA
                                                         ACTGCCGTGGCGAAGGGGTGGCCTCCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAG
                                                                                                                                                                                                                                                                                                                                            TGTGTAACAGTTCACCACTTCCAGAGTGTCGTCATGCCCAAAACATGTTTAAGAAAGGAA
                                                                                                              ACATCCTACAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAG
                                                                                                                                    ACATCCTACAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAG
                                                                                                                                                                                       AGCAGTAGCTCCTTGCTAACGATGTTTCAGGAGGTTTGGGGSACTTGGTTTTAATGAGCT
                                                                                                                                                                                                                                                                                                    AGCAGTAGCTCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATACTGGGAAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTAT
                                   ACTGCCGTGGCGAAGGGGTGGCCTCGGAGGCAGGCTGCTGGAGCTGCTTTAG
                                                                                                                                                                                                                                                                                                                                                                                                                       TGTTCTTTTGAAGTAAGGCCAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 631;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          몂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ۲
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 860;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                         4843
                                                                                                              279
                                                                                                                                                  4783
                                                                                                                                                                                       339
                                                                                                                                                                                                                             4723
                                                                                                                                                                                                                                                                                                        4663
                                                                                                                                                                                                                                                                                                                                              459
                                                                                                                                                                                                                                                                                                                                                                                 4603
                                                                                                                                                                                                                                                                                                                                                                                                                                                          4543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4423
                                   219
                                                                                                                                                                                                                                                                   399
                                                                                                                                                                                                                                                                                                                                                                                                                       519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
```

```
Ś
                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: DNA
; ORGANISM: Human
US-10-027-632-147620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/10/027,632
CURRENT FILING DATE: 2002-04-30
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR FILING DATE: 2000-07-12
PRIOR APPLICATION NUMBER: US 60/198,676
PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR PILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR PILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR PILING DATE: 1999-11-23
PRIOR PILING DATE: 1999-11-23
PRIOR APPLICATION NUMBER: US 60/156,358
PRIOR PILING DATE: 1999-09-28
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR PILING DATE: 1999-08-09
PRIOR PILING DATE: 1999-08-09
PRIOR PILING DATE: 1999-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 39
US-10-027-632-147620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 325720
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 147620
LENGTH: 841
                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 147620, Application US/10027632
Publication No. US20020198371A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
TITLE OF INVENTION: Polymorphisms in the Human Genome
FILE REFERENCE: 108827.119
                                                                                                                                    4185
                                                                                                                                                                                                                                                                                   4065
                                                                                                                                                                                                                                                                                                                                           4005 AACATAGGAGGTCACTGGAAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5024
                            241
                                                                                                   181
                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               158
                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                 ,008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       218
                                                                                                                                                                                                                                                                                                                          H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98
                                                                                                                  AGTTGCTGCCTCGTATCTCAGGTTTTTTCTGTTTTTTGAGAAATGGACAGTTTTTTGACC
                                                                                                                                                                                         TTTTGGGGGTGGGGCGGGTGTTGTCATTGTTCTTTCCCTTCCTGTAAGTGTCGCT
                                                                                                                                                                                                                                                                  TTGAGTTTTATCAGCTACAATGTGGGTCCTCTTTTGAAGCCTTAATTCACAACAGCAGCT
                                                   AGGATGTGACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTC
                                                                                                                                                                                                                                             TTGAGTTTTATCAGCTACAGTGTGGGTCCTCTTTTGAAGCCTTAATTCACAACAGCAGCT
                                                                                                                                                                                                                                                                                                                    AACATAGGAGGTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGC
                                                                                             AGTTGCTGCCTCGTATCTCAGGTTTTTCTCTGTTTTTTGAGAAATGGACAGTTTTTTGACC
                                                                                                                                                                    TTTTGGGGGTGGGGTGGGGGGTGTTGTCATTGTTCTTTCCCTTCCTGTAAGTGTCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTTCTTTTGAAGTAAGGCCAG 5045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGATTTAGGACATGTGTAAAGTTAGATGGAAAGACTGTAAATGTTTAATATGGATATAG 5023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGATACAGATGGTGATTTTAAAGAGCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAA 4963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGATACAGATGGTGATTTTAAAGAGCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAA 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGATTTAGGACATGTGTAAAGTTAGATGGAAAGACTGTAAATGTTTAATATGAATATAG
                                                                                                                                                                                                                                                                                                                                                                                             11.0%; ilarity 99.5%; Conservative
                                                                                                                                                                                                                                                                                                                                                                                         Score 600; DB 13;
Pred. No. 6.5e-310;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 17
                                                                                                                                                                                                                                                                                                                                                                                                                             Length 841;
                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                         4304
                                                                                                                                4244
                                                                                                                                                                                                       4184
                                                                                                                                                                                                                                                                                4124
                      300
                                                                                             240
                                                                                                                                                                    180
                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                        4064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  159
                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뭕
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   皮
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
Query Match
Best Local Similarity
Matches 800; Conserv
```

밁 S 밁 Ś 밁 S 밁

Conservative

11.0%;

Score 600; DB 17; Length 841; Pred. No. 6.5e-310; o; Mismatches 4; Indels

٥,

Gaps

```
; ORGANISM: Human US-10-027-632-147620
                                       ; NUMBER OF SEQ ID NOS: 3
SOFTWARE: Fast SEQ for W
SEQ ID NO 147620
LENGTH: 841
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-027-632-147620
                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR FILLING DATE: 2000-07-12
PRIOR APPLICATION NUMBER: US 60/198,676
PRIOR FILLING DATE: 2000-04-20
PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR FILLING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR FILLING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR FILLING DATE: 1999-11-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 147620, Application US/10027632
Publication No. US20030204075A9
GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
TITLE OF INVENTION: Polymorphisms in the Human Genome
FILE REFERENCE: 108827,129
CURRENT APPLICATION NUMBER: US/10/027,632
CURRENT FILING DATE: 2002-04-30
CURRENT FILING DATE: 2002-04-30
                                                                                                                                                   PRIOR APPLICATION NUMBER: US 60/156,358
PRIOR FILING DATE: 1999-09-28
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR FILING DATE: 1999-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4545 GTGTAACAGTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGCCGTGGCGAAGGGGTGGCCTC 4808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGCCGTGGCGAAGGGGTGGCCTC 804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CATTCTACAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATCCTACAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGTAGCTCCTTGCTAACGATGTTTCAGGAGGTTTGGGGGACTTGGTTTTAATGAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAGTAGCTCCTTGCTAACGATGTTTCAGGAGGTTTGGGCCACTTGGTTTTAATGAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGTAACAGTTCACCACTTCCAGAGTGTGGTCATGCCCCAAAACATGTTTAAGAAAGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATG 4424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACACAGACCGACTIGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATACTGGGAAAGTGCYGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AACACAGACCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACA 4364
                                                                                                            for Windows
                                                                                                            Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
```

```
RESULT 41
US-10-027-632-24920/c
  Sequence 24920, Application US/10027632

Publication No. US20020198371A1

GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
TITLE OF INVENTION: Polymorphisms in the Human Genome
FILE REFERENCE: 108827.129

CURRENT APPLICATION NUMBER: US/10/027,632

CURRENT FILING DATE: 2002-04-30

PRIOR APPLICATION NUMBER: US 60/198,676

PRIOR APPLICATION NUMBER: US 60/198,676

PRIOR FILING DATE: 2000-07-12

PRIOR APPLICATION NUMBER: US 60/198,676

PRIOR FILING DATE: 2000-04-20
                                                                                                                                                                                                                                                                                                                                                                                                 4785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         290
                                                                                                                                                                                                                                                                                                                                                                                                                                            721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGCCGTGGCGAAGGGGTGGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                          CATTCTACAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATCCTACAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGTAGCTCCTTGCTAACGATGTTTCAGGAGGTTTGGGGGACTTGGTTTTAATGAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGTAACAGTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTTAAGAAAGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATACTGGGAAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AACACAGACCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAGTAGCTCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATACTGGGAAAGTGCYGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AACACAGACCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGATGTGACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGATGTGACTTCATGTTTCCTATGGTGACTTCTAAAACCCAGCACAGAATGATATGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTTGCTGCCTCGTATCTCAGGTTTTTTCTCTGTTTTTTGAGAAATGGACAGTTTTTTGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTTGCTGCCTCGTATCTCAGGTTTTTTCTCTGTTTTTTGAGAAAATGGACAGTTTTTTTGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTTGGGGGTGGGCCGGGTGTTGTCATTGTTCCCTTCCTGTAAGTGTCCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTTTGGGGGTGGGGCTGGTGTTGTCATTGTTCTTTCCCTTCCTGTAAGTGTCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGAGTTTTATCAGCTACAGTGTGGGTCCTCTTTTTGAAGCCTTAATTCACAACAGCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGAGTTTTATCAGCTACAATGTGGGTCCTCTTTTGAAGCCTTAATTCACAAACAGCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                 4808
                                                                                                                                                                                                                                                                                                                                                          804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; PRIOR APPLICATION NUMBER: US 60/193,483
; PRIOR FILING DATE: 2000-03-29
; PRIOR APPLICATION UNMBER: US 60/185,218
; PRIOR FILING DATE: 2000-02-24
; PRIOR FILING DATE: 1909-01-23
; PRIOR FILING DATE: 1999-11-23
; PRIOR APPLICATION NUMBER: US 60/156,358
; PRIOR APPLICATION NUMBER: US 60/146,002
; PRIOR APPLICATION NUMBER: US 60/146,002
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILING DATE: 1999-08-09
; PRIOR FILI
RESULT 42
US-10-027-632-24921/c
US-10-027-632-24921, Application US/10027632
Publication No. US20020198371A1
GENERAL INFORMATION:
APPLICANT: Wang, David G.
                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                  멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 9.9%;
Best Local Similarity 99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 641;
                                                                                                                                                                                                               4989
                                                                                                                                                                                                                                                                                            4929
                                                                                                                                                                                                                                                                                                                                                                              4869
                                                                                                                                                                                                                                                                                                                                                                                                                                                             4809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       163
                                                                                                                                                                                                                                                                                                                                                                                                                      223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        583
                                                                                                                                                                                                                                                      103
                                                                                                                                                                       43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTT 5031
                                                                                                                                                                                                                                                      GCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTA
                                                                                                                                                                                                                                                                             GCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTA
                                                                                                                                                                                                                                                                                                                                                             GCATGTAATTGGGGAAACCCTCGCGTCTACTAGGGGTGATACAGATGGTGATTTTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                CATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGTAGTTTTTGATGTTATGTACACACACACACAATGTGTAACAGTTCACCACTTCCAGA
                                                                                                                                                                       GATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTT
                                                                                                                                                                                                                                                                                                                                       GCATGTAATTGGGGAAACCCCTCGYKTCTACTAGGGGTGATACAGATGGTGATTTTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                      CAGTAGTTTTTGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60/146,002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/156,358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/167,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60/193,483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 541; DB 13;
Pred. No. 2.8e-278;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                4928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4508
                                                                                                                                                                                                                                                        44
                                                                                                                                                                                                                                                                                                 4988
                                                                                                                                                                                                                                                                                                                                       104
                                                                                                                                                                                                                                                                                                                                                                                                                         164
                                                                                                                                                                                                                                                                                                                                                                                                                                                               4868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            584
```

밁 ર્શ 음 중

음 성

음 성

멍 8 밁 ક 음 성

밁 र् 밁 8 밁 ঠ 밁 S 밁 ঠ 밁 ঠ 밁 र्

밁

3

GATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTT 1

```
NUMBER OF SEQ ID NOS: 325720
; SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 24921
; LENGTH: 803
; TYPE: DNA
; ORGANISM: Human
US-10-027-632-24921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 60/198,676
PRIOR FILING DATE: 2000-04-20
PRIOR PPLICATION NUMBER: US 60/193,483
PRIOR FILING DATE: 2000-03-29
PRIOR PILING DATE: 2000-03-29
PRIOR PILING DATE: 2000-02-24
PRIOR PILING DATE: 2000-02-24
PRIOR PILING DATE: 1999-11-23
PRIOR PILING DATE: 1999-11-23
PRIOR PILING DATE: 1999-11-23
PRIOR APPLICATION NUMBER: US 60/156,358
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR PILING DATE: 1999-09-28
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR FILING DATE: 1999-09-28
PRIOR PILING DATE: 1999-08-09
PRIOR FILING DATE: 1999-08-09
PRIOR FILING DATE: 1999-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 641; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/10/027,632
CURRENT FILING DATE: 2002-04-30
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR FILING DATE: 2000-07-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     E OF INVENTION: Identification and Mapping of Single Nucleotide OF INVENTION: Polymorphisms in the Human Genome REFERENCE: 108827.129
                                  4989
                                                                                                                                                                                                                                                                                                                     4809
                                                                                                                                                                                                                                                                                                                                                                                                                 4749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4389 AAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCAACG
                                                                                                                                                                           163
                                                                                                                                                                                                                                                                         223
                                                                                                                                                                                                                                                                                                                                                                       283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                643
GATGGAAAGACTGTAAATGTTTAATATGGATATAGTGTTCTTT
                                                                                                               GCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTA 4988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGT
                                                                            GCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTA
                                                                                                                                                                                                                     GCATGTAATTGGGGAAACCCTCGCGTCTACTAGGGGGTGATACAGATGGTGATTTTAAAGA
                                                                                                                                                                                                                                                                                                                 TCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGCCTC
                                                                                                                                                                                                                                                                                                                                                                TCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTCTTGGC 468
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCAGGAGGTTTGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGTGGTCATGCCCAAAACATGTTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGATGT 4628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGTAGTTTTTGATGTTATGTACACACACACACAAATGTGTAACAGTTCACCACTTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGTĀGTTTTTGĀTGTTATGTACACACACACACAATGTGTĀACAGTTCACCACTTCCAGA 4568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTTGAGTTAGTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTTGAGTTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 541; DB 13;
Pred. No. 2.8e-278;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                 4868
                                                                                                                                                                                                                                                                                                                                                                                                                                                           284
                                                                                                                                                                                                                       492E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4748
                                                                                                                                                                        104
                                                                                                                                                                                                                                                                    164
                                                                                                                                                                                                                                                                                                                                                                224
                                                                                                                                                                                                                                                                                                                                                                                                               4808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               524
```

Ś

δ 맑 5 밁 5 В ક 밁 Ś 묽 S 뭐 Ś 밁 ঠ 밁 ठ 밁 8 밁

```
APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single Nucleotide

TITLE OF INVENTION: Polymorphisms in the Human Genome

FILE REFERENCE: 108827.129

CURRENT APPLICATION NUMBER: US/10/027,632

CURRENT FILING DATE: 2002-04-30

PRIOR APPLICATION NUMBER: US 60/218,006

PRIOR FILING DATE: 2000-07-12

PRIOR APPLICATION NUMBER: US 60/198,676

PRIOR FILING DATE: 2000-07-12

PRIOR APPLICATION NUMBER: US 60/193,483

PRIOR APPLICATION NUMBER: US 60/193,483

PRIOR APPLICATION NUMBER: US 60/193,483

PRIOR APPLICATION NUMBER: US 60/185,218

PRIOR APPLICATION NUMBER: US 60/185,218

PRIOR APPLICATION NUMBER: US 60/185,363

PRIOR APPLICATION NUMBER: US 60/167,363

PRIOR APPLICATION NUMBER: US 60/167,363

PRIOR APPLICATION NUMBER: US 60/167,363

PRIOR APPLICATION NUMBER: US 60/167,358

PRIOR FILING DATE: 1999-09-28

PRIOR FILING DATE: 1999-09-28

PRIOR FILING DATE: 1999-09-29

PRIOR FILING DATE: 1999-09-29

PRIOR FILING DATE: 1999-08-29

                                         밁
                                                                              Ş
  S
                                                                                                                                뭐
                                                                                                                                                                      S
                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: DNA
; ORGANISM: Human
US-10-027-632-24920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 43
US-10-027-632-24920/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
SEQ ID NO 24920
LENGTH: 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Best Local Similarity Matches 641; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 24920, Appl
Publication No. US20
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
                                                                                     4809
                                                                                                                                                                                                                                                                                                                                                4629
                                                                                                                                                                        4749
                                                                                                                                                                                                                                                             4689
                                                                                                                                                                                                                                                                                                                                                                                                                                 4569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4509
                                            223
                                                                                                                                                                                                                     343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4389 AAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCAACG
                                                                                                                                283
                                                                                                                                                                                                                                                                                                        403
                                                                                                                                                                                                                                                                                                                                                                                           463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       24920, Application US/10027632 ion No. US20030204075A9
GCATGTAATTGGGGAAACCCTCGCGTCTACTAGGGGGTGATACAGATGGTGATTTTAAAGA 4928
                                                                                TCACTAGTGTCAGATAATCAGTTCTTGGAAATCGAGACTGCCGTGGCGAAGGGGTGGCCTC
                                                                                                                                                                                                                                                CATGGTCCCCTTCCTGCAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGT 4748
                                                                                                                                                                                                                                                                                                                            TTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTTTGGC 4688
                                                                                                                                                                                                                                                                                                                                                                                                                    GTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGATGT
                                                                                                                                                                                                                   CATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGT
                                                                                                                                                                                                                                                                                                                                                                                         GTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGTAGTITTTGATGTTATGTACACACACACACAATGTGTAACAGTTCACCACTTCCAGA 4568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTTGAGTTAGTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCAACG
                                                                                                                                                                                                                                                                                                      TTCAGGAGGTTTGGGGCACTTGGTTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGTAGTTTTTGATGTTATGTACACACACACCAAATGTGTAACAGTTCACCACTTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTIGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 541; DB 17;
Pred. No. 2.8e-278;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 803;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                        4808
                                          164
                                                                                                                                                                                                                                                                                                                                                                                         404
                                                                                                                                                                                                                                                                                                                                                                                                                                 4628
                                                                                                                             224
                                                                                                                                                                                                                                                                                                      344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4448
                                                                                                                                                                                                                284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
```

```
FILE OF INVENTION: POLYMOTPHISMS IN THE HU
FILE OF INVENTION: POLYMOTPHISMS IN THE HU
FILE OF ING DATE: 2002-04-30
PRIOR APPLICATION NUMBER: US/10/027,632
CURRENT FILING DATE: 2000-09-12
PRIOR PILING DATE: 2000-09-12
PRIOR PILING DATE: 2000-09-20
PRIOR PILING DATE: 2000-09-20
PRIOR PILING DATE: 2000-03-29
PRIOR FILING DATE: 2000-03-29
PRIOR FILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR PILING DATE: 1999-11-23
PRIOR PILING DATE: 1999-09-28
PRIOR PILING DATE: 1999-09-28
PRIOR APPLICATION NUMBER: US 60/156,358
PRIOR PILING DATE: 1999-09-28
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR PILING DATE: 1999-08-09
NUMBER OF ESQ ID NOS: 325720
SOPTWARE: PASESEQ for Windows Version 4.0
SEQ ID NO 24921
                          ર્ક
                                                                        밁
                                                                                                          श्
                                                                                                                                                  밁
                                                                                                                                                                                S
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: DNA
; ORGANISM: Human
US-10-027-632-24921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 44
US-10-027-632-24921/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single
TITLE OF INVENTION: Polymorphisms in the Human Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 24921, Application US/10027632 Publication No. US20030204075A9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity
hes 641; Conserv
                                                                                                                                                                                          4569
                                                                                                                                                                                                                                                                    4509
                                                                                                                                                                                                                                                                                                                                              4449
                                                                                                                                                                                                                                                                                                                                                                                  4989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4929
                                      4689
                                                                                                                                                    463
                                                                                                                                                                                                                                523
                                                                                                                                                                                                                                                                                                          583
                                                                            403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    803
                                                                                                                                                                            GTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGATGT 4628
                                                                                                                                                                                                                                                    CAGTAGTTTTTGATGTATGTACACACACACACCAAATGTGTAACAGTTCACCACTTCCAGA 4568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTT 5031
                                  CATGGTCCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGT 4748
                                                                                                                                                                                                                                CAGTAGTTTTTGATGTTATGTACACACACACCAAATGTGTAACAGTTCACCACTTCCAGA
                                                                                                                                                                                                                                                                                                          ATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTCACA
                                                                                                                                                                                                                                                                                                                                ATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTTAATCAGACATTCTCAAGTTTTCACA 4508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTA 4988
                                                                                              TTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTTGGC 4688
                                                                                                                                                    GTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTA 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                            9.9%;
nilarity 99.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 541; DB 17; Length 803; Pred. No. 2.8e-278; O; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                464
                                                                                                                                                                                                                                                                                                          524
                                                                                                                                                                                                                                                                                                                                                                                    584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 104
284
                                                                          344
                                                                                                                                                    404
                                                                                                                                                                                                                                                                                                                                                                                                                          4448
                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
```

```
GENERAL INFORMATION: US2004025086A1

GENERAL INFORMATION: Schlegel. Robert

APPLICANT: Schlegel. Robert

APPLICANT: Monahan, John

ITILE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR

TITLE OF INVENTION: HUMAN PROSTATE CANCER

FILE REFERENCE: MRI-007BCN

CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT PAPPLICATION NUMBER: 09/785,276

PRIOR APPLICATION NUMBER: 09/785,276

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR FILING DATE: 2003-02-17

PRIOR FILING DATE: 2000-03-16

PRIOR APPLICATION NUMBER: 60/189,862

PRIOR APPLICATION NUMBER: 60/189,862

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/219,007

PRIOR APPLICATION NUMBER: 60/219,007

PRIOR APPLICATION NUMBER: 60/219,007

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE:
밁
                                      Ş
                                                                                                         밁
                                                                                                                                                        Ś
                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-357-930-43560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-357-930-43560
                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 100.0%;
Marches 431; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOPTWARE: FastSEQ
SEQ ID NO 43560
LENGTH: 518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 43560, Application US/10357930 Publication No. US20040259086A1
                                                                                                                                                                 4235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4809
                             4295 GATATGACTCAACACAGACCGACTTGGTTATGGGGATGATGAGGCCGCACAGACCTCACTA 4354
                                                                                                                                                                                                                                                      4175 AAGTGTCGCTAGTTGCTGCCTCGTATCTCAGGTTTTTCTCTGTTTTTTGAGAAAATGGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4989 GATGGAAAGACTGTAAATGTTTAATATGGAATATAGTGTTCTTT 5031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               283
                                                                                                            73
                                                                                                                                                                                                                         13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    43
                                                                                                                                       TTTTTTGACCAGGATGTGACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAAT 4294
                                                                                                                                                                                                                         AAGTGTCGCTAGTTGCTGCCTCGTATCTCAGGTTTTTTCTCTGTTTTTGAGAAATGGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTA 4988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCATGTAATTGGGGAAACCCTCGCGTCTACTAGGGGTGATACAGATGGTGATTTTTAAAGA
GATATGACTCAACAGACCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTT 1
                                                                                                                                                                                                                                                                                                                                   7.9%; Score 431; DB 18; 1
100.0%; Pred. No. 2.6e-219;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                      <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        THERAPY OF
                                                                                                                                                                                                                                                                                                                                         Gape
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4928
                                                                                                               132
                                                                                                                                                                                                                                                                                 4234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                164
                                                                                                                                                                                                                         72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               224
```

```
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 62232
SOPTWARE: FRASTSEQ for Windows Version 4.0
SEQ ID NO 10717
LENGTH: 425
TYPE: DNA
CRGANISM: Homo sapiens
US-10-357-930-10717
           닭
                                      Ś
                                                                             밁
                                                                                                      S
                                                                                                                                                 뭐
                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 46
US-10-357-930-10717/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 09/785,276
PRIOR FILING DATE: 2003-02-16
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-02-17
PRIOR PILING DATE: 2000-03-16
PRIOR PILING DATE: 2000-03-16
PRIOR PILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR PILING DATE: 2000-05-25
PRIOR FILING DATE: 2000-05-25
PRIOR PILING DATE: 2000-06-09
PRIOR PILING DATE: 2000-06-09
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                               Query Match 7.6%; Score 416; DB 18; I Best Local Similarity 100.0%; Pred. No. 2.8e-211; Matches 416; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 10717, Application US/10357930
Publication No. US20040259086A1
GENERAL INFORMATION:
APPLICANT: Schlegel. Robert
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
APPLICANT: Monahan, John
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE MRI-007ECN
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT FILING DATE: 2003-02-04
DBDIO ADDITORTURE 2003-02-04
DBDIO ADDITORTURE 2003-02-04
           304
                                                                                                                                                   424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4595 AGAAAGGAAAG 4605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            253
                                  TACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAA 1433
                                                                                             TGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACAT
     TACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAA
                                                                       CACACCAAATGTGTAACAGTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTA 4594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGAAATCTTTAATCAGACATTCTCAAGTTTCACACAGTAGTTTTTTGATGTTATGTACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGAAATCTTTAATCAGACATTCTCAAGTTTTCACACAGTAGTTTTTGATGTTATGTACACA 4534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTTGTGCACAAATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTTGTGCACAAATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACACCAAATGTGTAACAGTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTA
                                                                                                                                                                                                                                                Length 425;
                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FOR
THERAPY OF
                                                                                                        1373
                                                                       305
                                                                                                                                             365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              252
                                                                                                                                                                                                             0
                                 Ś
                                                                     맑
                                                                                                   Ş
                                                                                                                                         밁
                                                                                                                                                                         Ś
                                                                                                                                                                                                             吊
                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
                                                                                                                                           407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1614
                                                                                                                                                                                                               467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                64
ACCAGACTGGAGCATCAGGGCCAAAGACAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAA
```

```
Sequence 3109, Application US/10357930

Publication No. US20040259086A1

GENERAL INFORMATION:
APPLICANT: Schlegel. Robert
APPLICANT: Schlegel. Robert
APPLICANT: Schlegel. Nobert
ITILE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
ITILE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF
ITILE OF INVENTION: HUMAN PROSTATE CANCER
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT APPLICATION NUMBER: 09/785,276
PRIOR FILLING DATE: 2003-02-16
PRIOR APPLICATION NUMBER: 60/189,862
PRIOR APPLICATION NUMBER: 60/189,862
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/215,007
PRIOR FILLING DATE: 2000-05-09
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR SPILLING DATE: 2000-12-13
NUMBER: FastSEQ for Windows Version 4.0
SEQ ID NO 31909
LENGTH: 467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 47
US-10-357-930-31909/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 100.0%; tes 414; Conservative (
                                                                                                              1376 CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA 1435
                                                                                                                                                                                                                                                                                                                                                                       1256 TTCTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCACCATCGCTATCGCCTACATCA 1315
ACCAGACTGGAGCATCAGGGCCAAAGAGACAAACTCAAGCTGCTGCACCTGGAGAAGCCAA 1495
                                                                                                                                                                                              CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGTGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTTAGAGGACAGCCCGCTGGTAC 1669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCCGTGCATCCCCGCCAG 1613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAATGAACCTGTCCCTGCTGCTCAGAGGGGTGGACAGAAAAGCGAGAGACGCCCCTCAGTCC 1553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAAGCC 149:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAG 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCC 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                       7.6%; Score 414; DB 18; ]
00.0%; Pred. No. 3.4e-210;
                                                                                                                                                                                                                                                                                                                                                                                                                                 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 467;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                              348
                                                                            288
                                                                                                                                                                                                                                                                                                                   408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            185
                                                                                                                                                                                                                                                                                                                                                                                                                                 0
```

```
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR PILING DATE: 2000-02-17
PRIOR PILING DATE: 2000-03-16
PRIOR PILING DATE: 2000-03-16
PRIOR PILING DATE: 2000-03-16
PRIOR PILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-06-09
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR PILING DATE: 2000-12-13
NUMBER OF SEO ID NOS: 62232
SOPTWARE: PASCSEQ for Windows Version 4.0
SEQ ID NO 40868
                                                                                                                                                                                                                                                                                                                                                                                                                    ; LENGTH: 467
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-357-930-40868
유 성
                                                                 밁
                                                                                                 १
                                                                                                                          문
                                                                                                                                                               श्च
                                                                                                                                                                                                        문
                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 48
US-10-357-930-40868/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 40868, Application US/10357930

Publication No. US20040259086A1

GENERAL INFORMATION:

APPLICANT: Schlegel. Robert

APPLICANT: Endege, Wilson
APPLICANT: Monshan, John

TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR

TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF

TITLE OF INVENTION: HUMAN PROSTATE CANCER

FILE REFERENCE: MRI-007BCN
                                                                                                                                                                                                                                                                                                                                              Query Match 7.6%; Score 414; DB 18; Length 467; Best Local Similarity 100.0%; Pred. No. 3.4e-210; Matches 414; Conservative 0; Mismatches 0; Indels
                                1496
                                                                                                                                                                        1376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1556
                                                                                                                                                                                                                            467
                                                                                                                                     347
                                                                                                                                                                                                          407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   227
 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          107
                                                                                    ACCAGACTGGAGCATCAGGGCCAAAGAGACAAACTCAAGCTGCTGCACCTGGAGAAAGCCAA 1499
                                                                                                                                                       CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGATTAAGA 1435
                                                                                                                                                                                                                                                                             TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCA
                                                                                                                                                                                                                                                                                                   TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCA 1315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTAC 1669
                                ATGAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCAC 1555
                                                                                                                                   CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA
                                                                                                                                                                                                        CCTGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGGCCAGCG 1615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAAGCGAGAACGCCCCTCAGTCCAC
                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                     288
                                                                                                                                                                                                                                                                             408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1555
                                                                 228
                                                                                                                                                                                                                                                                                                                                                0
                       5
                                                                 밁
                                                                                              Ś
                                                                                                                                  밁
                                                                                                                                                                  ঠ
                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; LENGTH: 467
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-357-930-41017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 49
US-10-357-930-41017/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              먉
                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 414; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 41017, Application US/10357930 Publication No. US20040259086A1
                                                                                                   1496
                                                                                                                                                                        1436
                                                                                                                                                                                                                                                                                                               1316
                                                                                                                                                                                                                                                                                                                                                                                  1256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1556
                                                                                                                                                                                                                                                                           407
                                                                 227
                                                                                                                                     287
                                                                                                                                                                                                        347
                                                                                                                                                                                                                                                                                                                                                467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGCACAAAGGCCCGTGCATCCCGCCAGCG
```

```
GENERAL INFORMATION:

APPLICANT: Schlegel. Robert

APPLICANT: Endege, Wilson

APPLICANT: Monahan, John

ITILE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HUMAN PROSTATE CANCER

FILE OF INVENTION: HUMAN PROSTATE CANCER

FILE REFERENCE: MRI-007BCN

CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT APPLICATION NUMBER: 09/785,276

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR FILING DATE: 2003-02-17

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR FILING DATE: 2000-05-15

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/219,007

PRIOR APPLICATION NUMBER: 60/219,007

PRIOR APPLICATION NUMBER: 60/219,007

PRIOR APPLICATION NUMBER: 60/219,007

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR FILING DATE: 2000-01-2-13

NUMBER: FastSEQ for Windows Version 4.0

1 DEPTION 1001-101-101

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-13

PRIOR FILING DATE: 2000-01-2-14

PRIOR FILING DATE: 2000
1556 CCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGGCCAGCG 1615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1376 CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGATTAAGA 1435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1616 TGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTAC 1669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCA
                                                                                                                                                                          ATGAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCAC 1555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCA 1315
                                                                                                                                                                                                                                                                                                                                                                  ACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAA 1495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA
                                                                                                                                                                                                                                                                                                             ACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7.6%; Score 414; DB 18; ilarity 100.0%; Pred. No. 3.4e-210; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 467;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FOR
THERAPY OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ب
4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                         168
                                                                                                                                                                                                                                                                                                             228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
```

```
RESULT 50
US-10-220-891-86/c
; Sequence 86, Application US/10220891
; Publication No. US20030207286A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: PatentIn version 3.2
SEQ ID NO 86
LENGTH: 789
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LCCATION: (2)..(3)
COTHER INFORMATION: a, t, G
FEATURE:
NAME/KEY: modified base
LOCATION: (5)..(5)
OTHER INFORMATION: a, t, c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/10/220,891
CURRENT FILING DATE: 2003-03-07
PRIOR APPLICATION NUMBER: JP 2000/140387
PRIOR FILING DATE: 2000-05-12
PRIOR APPLICATION NUMBER: JP 2000/159195
PRIOR FILING DATE: 2000-03-07
NUMBER OF SEQ ID NOS: 108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: NAKAGAWARA, AKIRA
TITLE OF INVENTION: NUCLEIC ACID SEQUENCES HAVING CHARACTERITICS OF ENHANCED
TITLE OF INVENTION: EXPRESSION IN HUMAN NEUROBLASTOMA WITH FAVORABLE PROGNOSIS
TITLE OF INVENTION: BASED ON COMPARISON BETWEEN HUMAN NEUROBLASTOMA WITH FAVORABLE
TITLE OF INVENTION: PROGNOSIS AND HUMAN NEUROBLASTOMA WITH UNFAVORABLE PROGNOSIS
FILE REFERENCE: 7388-73435
                                                                                                                                                                                                                                                  NAME/KEY: modified base LOCATION: (201)..(201) OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                              FEATURE:
NAME/KEY: modified base
LOCATION: (46)...(46)
OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
NAME/KEY: modified base
LOCATION: (8)..(12)
OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PEATURE: modified base LOCATION: (2)..(3)
FEATURE:
NAME/KEY: modified base
LOCATION: (664)..(664)
OTHER INFORMATION: a, t,
                                                                                                                                          NAME/KEY: modified_base LOCATION: (633)..(633)
                                                                                                                                                                                    NAME/KEY: modified_base LOCATION: (595)..(595) OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: modified base LOCATION: (32)..(32)
                                                               OTHER INFORMATION:
                                                                          NAME/KEY: modified base LOCATION: (657)..(657)
                                                                                                                         OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: modified base LOCATION: (35)..(35)
                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1616
                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCCCAGCGTGCCAGCGTGCAGCCGTCGCTTAGAGGACAGCCCGCTGGTAC 1669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCCCAGCGTGCCAGCGTGCAGCCGTCGCTTAGAGGACAGCCCGCTGGTAC
                                                            a, t,
 a, t,
ū
                                                            ú
                                                                                                                         Ç
                                                                                                                                                                                       ç
                                                                                                                                                                                                                                                     'n
                                                                                                                                                                                                                                                                                                                 ú
                                                                                                                                                                                                                                                                                                                                                                               ú
                                                                                                                                                                                                                                                                                                                                                                                                                                           ņ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ú
á
                                                            á
                                                                                                                         á
                                                                                                                                                                                       á
                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                           unknown
                                                                                                                                                                                       unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unknown
 unknown
                                                             unknown
                                                                                                                                                                                                                                                     unknown
                                                                                                                                                                                                                                                                                                                   unknown
                                                                                                                                                                                                                                                                                                                                                                                unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                           unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       unknown
                                                             ö
                                                                                                                           ů
                                                                                                                                                                                       유
                                                                                                                                                                                                                                                     ç
                                                                                                                                                                                                                                                                                                                   ဝ္ဂ
                                                                                                                                                                                                                                                                                                                                                                                ဝူ
                                                                                                                                                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   or other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ٥r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                             other
                                                                                                                                                                                         other
                                                                                                                                                                                                                                                                                                                   other
                                                                                                                                                                                                                                                                                                                                                                                                                                             other
                                                                                                                                                                                                                                                                                                                                                                                other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           54
```

```
S
                                                맑
                                                                   Ş
                                                                                          망
                                                                                                                  Ş
                                                                                                                                                 밁
                                                                                                                                                                     S
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                      Š
                                                                                                                                                                                                                                                                                                   片
                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-220-891-86
                                                                                                                                                                                                                                                                                                                                                                                                    Matches 453;
                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PEATURE:
NAME/KEY: modified base
LOCATION: (783)...(783)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: modified_base LOCATION: (766)...(766) OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: modified base LOCATION: (710)..(710) OTHER INFORMATION: a, t.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: modified base LOCATION: (697)..(697) OTHER INFORMATION: a, t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: modified base LOCATION: (695)...(695) OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: modified base LOCATION: (693)..(693) OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: modified base LOCATION: (666)..(666) OTHER INFORMATION: a, t, FEATURE:
                       5115
                                                                          5055
                                                                                                                          4995
                                                                                                                                                                           4935
                                                                                                                                                                                                                           4875
                                                                                                                                                                                                                                                                          4815
                                                                                                                                                                                                                                                                                                                             4755
                                                                                                                                                                                                                                                                                                                                                                              4695
                                                 144
                                                                                                                                                                                                    324
                                                                                                                                                                                                                                                    384
                                                                                                                                                                                                                                                                                                    444
                                                                                                  204
                                                                                                                                                  264
                                                                                                                                                                                                                                                                                                                                                     504
84
                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                 AAGACTGTAAATGTTTAATATATATATATATGTGTTGTTTTTGAAGTAAGGCCAGCTGTTGAAC 5054
                                                                                                                                                                                                                                                                                                    GTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGCCTCGGAGGC 385
                                                                                                                                                                                                                                                                                                                    GTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGCCCTCGGAGGC 4814
              ATAAAATCAAAACTGGTACCTGTTTATACATAAA 5148
                                                               GGTTAAACTGTGCATTTCTCATTTTGATGTGTCATGTTATGTTAATGTATGAAATGATTAA 5114
                                                                                                                                                                  CTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTAGATGGA 4994
                                                                                                                                                                                                                                                                                                                                                     CCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGTTCACTA
                                                                                                                                                                                                                                                                                                                                                                             CCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGTTCACTA
                                                  AAGNCTGTAAATGTTTAATATGAATATAGTGTTCTTTTGAAGTAAGGCCAGCTGTTGAAC 145
                                                                                                                                                    CTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTAGATGGA
                                                                                                                                                                                                    AATTGGGGAAACCCTCGCGTCTACTAGGGGTGATACAGATGGTGATTTTAAAGAGCAAAA
                                                                                                                                                                                                                   AATTGGGGAAACCCTCGCGTCTACTAGGGGTGATACAGATGGTGATTTTAAAGAGCAAAA 4934
                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                7.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ŗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                g, unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                    Score 403; DB 17;
Pred. No. 2.7e-204;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ဝူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    e
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     မ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       မ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    or other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       other
 51
                                                                                                                                                                                                                                                                                                                                                                                                                            Length 789;
                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                     325
                                                                                                                                                                                                                                                                                                                                                                              4754
```

Search completed: February Job time : 2782 secs 15, 2005, 22:17:30

205

85

265

4874

445

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM protein - protein search, using sw model
                                      Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                  Published Applications AA:*

1: /cgn2 6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2 6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*

3: /cgn2 6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*

4: /cgn2 6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

5: /cgn2 6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

6: /cgn2 6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*

7: /cgn2 6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*

8: /cgn2 6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BLOSUM62
                                                                                                                                                                                                                     US-10-029-345A-109
3418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           February 9, 2005, 12:09:54; Search time 125.848 Seconds (without alignments) 1721.062 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1373511 segs, 325702437 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MAHEMIGTQIVTERLVALLE.....LGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Copyright
                                                                                                                                                          / Cgn2_6/ptodata///pubpaa/USO9A_PUBCOMB.pep:*
/ Cgn2_6/ptodata//pubpaa/USO9B_PUBCOMB.pep:*
/ Cgn2_6/ptodata//pubpaa/USO9B_PUBCOMB.pep:*
/ Cgn2_6/ptodata//pubpaa/USO9_PUBCOMB.pep:*
/ Cgn2_6/ptodata//pubpaa/USO9_NEW_PUB.pep:*
/ Cgn2_6/ptodata//pubpaa/USOB_PUBCOMB.pep:*
/ Cgn2_6/ptodata//pubpaa/USOC_PUBCOMB.pep:*
/ Cgn2_6/ptodata//pubpaa/USOC_PUBCOMB.pep:*
/ Cgn2_6/ptodata//pubpaa/USOC_PUBCOMB.pep:*
/ Cgn2_6/ptodata//pubpaa/USOC_NEW_PUB.pep:*
/ Cgn2_6/ptodata//pubpaa/USOC_NEW_PUB.pep:*
/ Cgn2_6/ptodata//pubpaa/USOC_NEW_PUB.pep:*
                                                                                                                                          _6/ptodata/1/pubpaa/US60_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1373511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              665
```

Result No.	Score	Query	Query Match Length DB	BG	ID	Description
1	3406	99.6	665	إو	US-09-816-494-2	Sequence 2, Appli
N	3406	99.6	665	φ	US-09-964-277-2	
ω	3406	99.6	665	15	US-10-377-072-26	Sequence 26, Appl
4	3406	99.6	665	15	US-10-072-012-680	680
ຫ	3406	99.6	665	15	US-10-168-506-14 .	
თ	3406	99.6	665	15	US-10-343-357-7	,
7	3406	99.6	665	15	US-10-257-026-2	Sequence 2, Appli
89	3406	99.6	665	16	US-10-648-593-240	240
9	3406	99.6	665	16	US-10-648-593-247	247
10	3406	99.6	665	16	US-10-377-072-26	
11	3406	99.6	690	15	US-10-072-012-679	679
12	3406	99.6	690	15	US-10-072-012-703	Sequence 703, App
13	3406	99.6	690	15	119-10-425-114-54204	

																											•	J	A T	?	
45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	ŀ	14	15	14
453	453	453	466.5	469	469	469	469	566	619	619	654.5	654.5	654.5	654.5	654.5	654.5	732.5	807	917	1075.5	1297	1302	1326	2500	2721.5	2930	3079.5	3358.5	3379.5	3399	3399
13.3	13.3	13.3	13.6	13.7	13.7	13.7	13.7	16.6	18.1	18.1	19.1	19.1	19.1	19.1	19.1	19.1	21.4	23.6	26.8	31.5	37.9	38.1	38.8	73.1	79.6	85.7	90.1	98.3	98.9	99.4	99.4
394	394	394	381	482	482	482	444	140	155	155	170	170	170	170	170	169	461	155	501	616	253	663	625	517	677	672	660	680	662	665	665
ø	9	9	14	16	15	14	9	17	9	9	15	14	14	φ	9	14	15	9	15	15	15	15	15	9	15	15	15	15	15	15	15
US-09-849-626-805	US-09-902-941-805	US-09-736-457-805	US-10-184-832-2	US-10-648-593-164	US-10-058-270A-130	US-10-346-356-2	US-09-964-899-47	US-10-803-738-12	US-09-955-732-6	US-09-964-277-6	US-10-655-073-16	US-10-405-808-16	US-10-314-058-14	US-09-847-519A-11	US-09-775-925-26	US-10-346-356-15	US-10-072-012-701	US-09-964-277-7	US-10-072-012-702	US-10-072-012-266	US-10-108-260A-4872	US-10-072-012-700	US-10-072-012-699	US-09-964-277-21	US-10-072-012-683	US-10-296-115-1259	US-10-072-012-682	US-10-072-012-256	US-10-072-012-258	US-10-072-012-681	US-10-094-749-2312
805,	805,	805		16,		Sequence 2, Appli	Sequence 47, Appl	e 12	6	>	16,	16,	e 14,	11,	Sequence 26, Appl		Sequence 701, App		702,	266, 1	4872	700,	Sequence 699, App	21, A	683,	1259	682,	256,	258,	681, 1	Sequence 2312, Ap

ALIGNMENTS

```
CURRENT APPLICATION NUMBER: US/09/816,494
; CURRENT FILING DATE: 2001-03-23
; PRIOR APPLICATION NUMBER: US 60/191,858
; PRIOR FILING DATE: 2000-03-24
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 2
; SEQ ID NO 2
; LENGTH: 665
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-816-494-2
                               Ş
                                                                                밁
                                                                                                                      Ś
                                                                                                                                                                  밁
                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-816-494-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 2, Application US/09816494
Patent No. US20020034807A1
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR
FILE REFERENCE: 10448-030002
                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 663; Conserv
121
                                        121
                                                                                  61
                                                                                                          61 DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL 120
                                                                                                                                                                                           1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVBYNTSHILEAININCSKLMKRRLQQ 60
                        LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                                                DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                    MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                           99.6%;
                                                                                                                                                                                                                                                     Score 3406; DB 9; Length 665;
Pred. No. 9e-238;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                                       <u>,</u>
                                                                                                                                                                                                                                                       Gaps
                                        180
                                                                                  120
                                                                                                                                                                       60
```

```
Sequence 2, Application US/09964277

Patent No. US20020137170A1

GENERAL INFORMATION:
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERNCE: 200125.434

CURRENT APPLICATION NUMBER: US/09/964,277

CURRENT APPLICATION NUMBER: US/09/964,277

CURRENT FILING DATE: 2001-09-25

NUMBER OF SEQ ID NOS: 22

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 2

LENGTH: 665
TYPE: PRT
ORGANISM: Homo sapiens
                     $
                                              밁
                                                                   Ś
                                                                                         밁
                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                        RESULT 2
US-09-964-277-2
                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     묽
                                                                                                                                Query Match 99.6%;
Best Local Similarity 99.7%;
Matches 663; Conservative
                       121
     121
                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                   13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                         Н
                                                                                                              μ
                                                                                  LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                    DKVLITELIOHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
LAGGFAEFŚRCFPGLCEGKŚTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                         DKVLITELIQHSAKHKVDIDCSQKVVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                      IIEVS 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                    QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SDILAPOTSTPSLTSSWYPATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                       QKPSDRADSRRSWHEESPFEKOFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNPNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNENFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              P$VP$VQP$L1ED$PLVQAL$GLHL$ADRLED$NKLKR$F$LDIK$V$Y$A$MAA$LHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                  665
                                                                                                                               Score 3406; DB 9;
Pred. No. 9e-238;
1; Mismatches 1;
                                                                                                                               1;
                                                                                                                                                    Length 665;
                                                                                                                                Indels
                                                                                                                              0;
180
                    180
                                                              120
                                         120
                                                                                    60
                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                               멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뭐
                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
```

```
GENERAL INFORMATION:

APPLICANT: Willennium Pharmaceuticals Inc.

APPLICANT: Curitis, Rory A.J.

APPLICANT: Cogan, Thomas Joseph
APPLICANT: Logan, Thomas Joseph
APPLICANT: Gluckemann, Maria A.

APPLICANT: Williamson, Mark J.
APPLICANT: Williamson, Mark J.
APPLICANT: Rudolph-Owen, Laura A.
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 3
US-10-377-072-26
; Sequence 26, Application US/10377072
; Publication No. US20040009501A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QTGASGPKSKLKLLHLEKPNEPVPAVSECGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
```

```
; PRIOR APPLICATION NUMBER: US 09/816,494
; PRIOR FILING DATE: 2001-03-23
; PRIOR APPLICATION NUMBER: US 09/815,419
; PRIOR FILING DATE: 2001-03-22
; Remaining Prior Application data removed - S
; NUMBER OF SEQ ID NOS: 114
; SOFTWARE: PastSEQ for Windows Version 4.0
; SEQ ID NO 26
; EQ ID NO 26
; LENGTH: 665
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-377-072-26
                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                     RESULT 4
US-10-072-012-680
                                                                                                                                                    र्
                                                                                                                                                                                      밁
                                                                                                                                                                                                        ક
                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
Sequence 680, Application US/10072012
Publication No. US20040033493A1
GENERAL INFORMATION:
APPLICANT: Tchernev, Velizar
APPLICANT: Spytek, Kimberly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 99.6%;
Best Local Similarity 99.7%;
Matches 663; Conservative
                                                                                                                                                          199
                                                                                                                                                                                        109
                                                                                                                                                                                                                   109
                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                               IIEVS
                                                                                                                                                          IIEVS
                                                                                                                                                                                        QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                       OKPSDRADSRRSWHEESPFEKOFKRRSCOMEFGESIMSENRSREELGKVGSOSSFSGSME
                                                                                                                                                                                                                                               SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                 SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                      SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                         SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                             SSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                               SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                      PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                    PSVPSVQPS1LEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LAGGFAEFSRCFPGLCEGKSTLVPTCISQFCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                            665
                                                                                                                               665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 3406; DB 1
Pred. No. 9e-238;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ı
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   File Wrapper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PALM
                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                        660
                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
```

```
APPLICANT: Guiev, Viadimir Y.
APPLICANT: Guiev, Vladimir Y.
APPLICANT: Golev, Vladimir Y.
APPLICANT: Wolenc, Adam R.
APPLICANT: Wolenc, Adam R.
APPLICANT: Furtak, Katarzyna
APPLICANT: Furtak, Katarzyna
APPLICANT: Furtak, Katarzyna
APPLICANT: Furtak, Katarzyna
APPLICANT: Furtak, Katarzyna
APPLICANT: Hieger, Danise M.
APPLICANT: Alsobrook II, John P.
APPLICANT: Lepley, Danise M.
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: 60/265, 102
PRIOR APPLICATION NUMBER: 60/265, 102
PRIOR APPLICATION NUMBER: 60/265, 514
PRIOR APPLICATION NUMBER: 60/265, 514
PRIOR APPLICATION NUMBER: 60/265, 517
PRIOR APPLICATION NUMBER: 60/265, 517
PRIOR APPLICATION NUMBER: 60/265, 412
PRIOR APPLICATION NUMBER: 60/265, 412
PRIOR APPLICATION NUMBER: 60/265, 412
PRIOR APPLICATION NUMBER: 60/265, 412
PRIOR APPLICATION NUMBER: 60/265, 412
PRIOR APPLICATION NUMBER: 60/265, 406
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER: 60/266, 767
PRIOR APPLICATION NUMBER
                                      δ
                                                                                                  밁
                                                                                                                                            Ś
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Homo US-10-072-012-680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Remaining Prior Application
NUMBER OF SEQ ID NOS: 1391
SOPTWARE: PatentIN Ver. 2.1
SEQ ID NO 680
LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                     Matches 663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                 181
                                                                                                  121
  181
                                                                                                                                                   121
                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Prior Application data
                                                                                               DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                               MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILFWLDKSVDFIEKAKASNGCV
                            QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                  MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                  DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Anderson,
Rastelli,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gerlach, Valerie
Taupier Jr, Raymond
Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Miller, Charles E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patturajan, Meera
Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zerhusen, Bryan
                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Luca
                                                                                                                                                                                                                                                                                                                                                                                                                       99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Muralidhara
                                                                                                                                                                                                                                                                                                                                                                                                     7.
                                                                                                                                                                                                                                                                                                                                                                                                  Score 3406; DB 1
Pred. No. 9e-238;
L; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                removed -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                See File Wrapper or
                                                                                                                                                                                                                                                                                                                                                                                                                                                 15;
                                                                                                                                                                                                                                                                                                                                                                                               1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Same
                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PALM
                                                                                                     180
                                                                                                                                                   180
                                                                                                                                                                                                                                                   120
  240
                                                 240
                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                     0
```

```
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: PLOWMAN, GREGORY D.
APPLICANT: MARTINEZ, RICARDO
APPLICANT: MAYTE, DAVID
APPLICANT: MAYTE, DAVID
APPLICANT: MANNING, GERARD
APPLICANT: SUDARSANAM, SUCHA
APPLICANT: FLANAGAN, PETER
TITLE OF INVENTION: MAMMALIAN PROTEIN PHOSPHATASES
FILE REFERENCE: 038602/1351
CURRENT APPLICATION NUMBER: US/10/168,506
CURRENT APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PCT/US00/34736
PCT/US00/34736
PCT/US00/34736
PCT/US00/34736
PCT/US00/34736
PCT/US00/34736
P
            Ś
                                                                                     S
                                                   밁
                                                                                                                              밁
                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 5
US-10-168-506-14
US-10-168-506-14
, Sequence 14, Application US/10168506
, Publication US20040053229A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                         Query Match
Best Local S
Matches 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                           663;
            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                 61
                                                                                       13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                            \vdash
                                                                                                                                                                 \vdash
                                                                                                                                                                                                       Similarity 99.7
                                                              DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSENSVHL 120
                                                                                                                                          MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                         DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                    MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ILEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QKPSDRADSRRSWHEESSPFEKQFKRRSCQMEFGESIMSENRSRERIGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSOLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKGAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SSSEDALBYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNPNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               665
                                                                                                                                                                                                                       99.6%;
                                                                                                                                                                                                    Score 3406; DB 15;
Pred. No. 9e-238;
1; Mismatches 1;
                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                          665;
                                                                                                                                                                                                  0
                                         120
                                                                                                                      60
                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 6
US-10-343-357-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IIEVS
```

```
181 QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                   SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LVHCLAGISRSATIAIAYIMKRMDMSLDEAVRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                    QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                            QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                        SDILAPQTSTPSLTSSWYPATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                          SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                         SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                  SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                        SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                    PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | OTGASGPKSKLKLLHLEKPNEPVPAVSECGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LVHCLAGISRSATIAIAYINKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
665
                                           665
                                                                                    660
                                                                                                                               660
                                                                                                                                                                                                                                                                  540
                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
```

US-10-343-357-7
; Sequence 7, Application US/10343357
; Publication No. US20040058341A1
; GENERAL INFORMATION:
; APPLICANT: INCYTE GENOMICS, INC.; TANG, Y.Tom
; APPLICANT: ELLIOTT, Vicki S.; RAMKUWAR, Jayalaxmi
; APPLICANT: WANG, Yumei E.; STEWART, Elizabeth A.
APPLICANT: WANG, Yumei E.; STEWART, Elizabeth A.
APPLICANT: LU, Dyung Aina M.; TRIBOULEY, Catherine M.
APPLICANT: LU, Dyung Aina M.; TRIBOULEY, Catherine M.
APPLICANT: LUS, Henry; WARREN, Bridget A.
APPLICANT: NGUYEN, Danniel B.; CHAWLA, Nariah R.
APPLICANT: NGUYEN, Danniel B.; CHAWLA, Nariah R.
APPLICANT: KEARNEY, Liam
; TITLE OF INVEWION: BROTEIN PHOSPHATASES
; FILE REFERENCE: PI-0173 PCT
; CURRENT APPLICATION NUMBER: US/10/343,357
; CURRENT EJLING DATE: 2000-07-28
; PRIOR APPLICATION NUMBER: US 60/221,679
; PRIOR APPLICATION NUMBER: US 60/223,272
; PRIOR APPLICATION NUMBER: US 60/223,272
; PRIOR APPLICATION NUMBER: US 60/224,309
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/226,728
; PRIOR APPLICATION NUMBER: US 60/227,366

```
RESULT 7

US-10-257-026-2

Sequence 2, Application US/10257026

Publication No. US20040086859A1

GENERAL INFORMATION:
APPLICANT: Merck Patent GmbH

TITLE OF INVENTION: New dual specifi

PILE REFERENCE: DUSP10KDWS
                                                                                                                     8 & 8
                                                                                                                                                                                                  중 유
                                                                                                                                                                                                                                         ક
                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                 중 유
                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; PRIOR FILING DATE: 2000-09-01
; NUMBER OF SEQ ID NOS: 20
; SOSTWARE: PERL Program
; SEQ ID NO 7
; LENGTH: 665
; TYPE: PRT
; ORGANISM: Homo sapiens
PENTURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte II
US-10-343-357-7
                                                                                                                                                                              당
                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                ક
                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ર્
                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 663; Conserv
                                                                                                                                                              601
                                                                                                                                                                                  541
                                                                                                                                                                                                      541
                                                                                                                          661
                                                                                                                                              601
                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                       663
                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ۲
                                                                                                       IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                             QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                     QTGASGPKSKLKLLHLEKPNEPVPÄVSEGGQKSETPLSPCADSATSEAAGQRPVHPÄSV
                                                                                                                                                                                                                                                                                                                                                                                                    LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                               QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                         PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                   QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                         LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                        665
                                                                                                                           665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ä
               specificity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 3406; DI
Pred. No. 9e-2:
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ļ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US20040058341A1 7480570CD1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3406; DB 1
No. 9e-238;
               phosphatase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                 660
                                                                                                                                                                                     600
                                                                                                                                                                                                        600
                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                               660
                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                  RESULT 8
US-10-648-593-240
   Sequence 240, Application US/10648593
Publication No. US20040106132A1
GENERAL INFORMATION:
APPLICANT: Bristol-Myers Squibb Company
TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/O
TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/O
TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS
FILE REFERENCE: D0273 NP
```

```
유 원
                            8
                                              S
                                                                   밁
                                                                                S
                                                                                                  닭
                                                                                                                   S
                                                                                                                                          망
                                                                                                                                                      S
                                                                                                                                                                      밁
                                                                                                                                                                                         á
                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: PRT; ORGANISM: Homo US-10-257-026-2
                                                                                                                                                                                                        용
                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/10/257, CURRENT FILING DATE: 2003-11-07 NUMBER OF SEQ ID NOS: 3 SOFTWARE: Patentin Ver. 2.1 SEQ ID NO 2 LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 99.6%;
Best Local Similarity 99.7%;
Matches 663; Conservative
              661
                                  601
                                                  601
                                                                     541
                                                                                     541
                                                                                                       481
                                                                                                                        481
                                                                                                                                                                             361
                                                                                                                                                                                                               301
661
                                                                                                                                          421
                                                                                                                                                           421
                                                                                                                                                                                             361
                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                         61
IIEVS
                                                                                                      SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                              QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSRBELGKVGSQSSFSGSME
                                                                    SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                           PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                  QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                               SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                         SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                     SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                            QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                        DKVLITELIQHSAKHKVDIDCSQKVVVYXDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                  DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                   QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
665
                665
                                                                                                                                                                                                                                                                                                                                                                                                                           Score 3406; DB 1
Pred. No. 9e-238;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                            15;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                              665;
                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                   660
                                                                                                                                                                                                                                                                                                                                     180
                                  660
                                                                     600
                                                                                     600
                                                                                                       540
                                                                                                                        540
                                                                                                                                          480
                                                                                                                                                           480
                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                             420
                                                                                                                                                                                              420
                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

AND/OR

```
CURRENT APPLICATION NUMBER: US/10/648,59
COURRENT FILING DATE: 2003-08-26
PRIOR APPLICATION NUMBER: 60/406,385
PRIOR FILING DATE: 2002-08-27
NUMBER OF SEQ ID NOS: 557
SOFTWARE: Patentin version 3.2
SEQ ID NO 240
LENGTH: 665
TYPE: PRT
ORGANISM: Homo sapiens
US-10-648-593-240
                                                                                      RESULT 9
US-10-648-593-247
                                                                                                                                                              S
                                                                                                                                                                                       멍
                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                 멍
                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
 Sequence 247, Application US/10648593
Publication No. US20040106132A1
GENERAL INFORMATION:
APPLICANT: Bristol-Myers Squibb Company
TITLE OF INVENTION: IDENTIFICATION OF GENES FOR PREDICTING
TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                     661
                                                                                                                                                                                                601
                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    μ
                                                                                                                                             IIEVS
                                                                                                                                                                     IIEVS
                                                                                                                                                                                                              QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                              SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                             QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                               SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                    SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSPLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                        SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                            PSVPSVQPSLLEDSPLVQALSGIHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                       SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                            PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNENFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LAGGFABESRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99.6%;
nilarity 99.7%;
Conservative
                                                                                                                                             665
                                                                                                                                                                      665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 3406; D
Pred. No. 9e-2
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6; DB 16;
9e-238;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
    ACTIVITY OF COMPOUNDS THAT TYROSINE KINASES AND/OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
RESULT 10
US-10-377-072-26
; Sequence 26, Application US/10377072
; Publication No. US20040157221A9
; GENERAL INFORMATION:
; APPLICANT: Millennium Pharmaceutica:
```

```
; TITLE OF INVENTION: PROTEIN TYROSINE KI
; FILE REFERENCE: D0273 NP
; CURRENT APPLICATION NUMBER: US/10/648,59
; CURRENT FILING DATE: 2003-08-26
; PRIOR APPLICATION NUMBER: 60/406,385
PRIOR FILING DATE: 2002-08-27
; NUMBER OF SEQ ID NOS: 557
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 247
; ELNGTH: 665
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-648-593-247
밁
                     S
                                           9
                                                                       중 유
                                                                                                                             Ş
                                                                                                                                                         占
                                                                                                                                                                                        Ś
                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 99.6%;
Best Local Similarity 99.7%;
Matches 663; Conservative
661
                          661
                                                    601
                                                                              601
                                                                                                          541
                                                                                                                                      541
                                                                                                                                                                  481
                                                                                                                                                                                            481
                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                       SABII
                                                                      QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                       SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                             SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                             SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                    QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREE!
                                                                                                                               SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRR
                                                                                                                                                                                                                                     SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                         PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                                                                                                                                                                                     SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                 QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                              QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                     LVHCLAGISRSATIAIAY IMKRMDMSLDEAYRFVKEKRPTISDNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                      LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                             QNGIGYYLNASNTCPKPDF1PESHFLRVPVNDSFCEKILPWLDKSVDF1EKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                          OQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DKYLITELIQHSAKHKVDIDCSQKVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                           PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DKVLITELIQHSAKHKVDIDCSQKVVVYXDQSSQDVASLSSDCFLTVLLGKLEKSPNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LAGGFABFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 3406; DB
Pred. No. 9e-238
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9e-238;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                   660
                                                                                                         600
                                                                                                                                   600
                                                                                                                                                               540
                                                                                                                                                                                         540
                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
```

Pharmaceuticals

```
ঠ
                                                                                   밁
                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                   श
                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ई
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-377-072-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: MPIO3-0180MNIM
CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR PILING DATE: 2000-06-29
PRIOR PILING DATE: 2000-01-28
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR FILING DATE: 2000-01-28
PRIOR PILING DATE: 2000-01-28
PRIOR PILING DATE: 2000-03-07
PRIOR PILING DATE: 2000-03-07
PRIOR PILING DATE: 2000-04-25
PRIOR PILING DATE: 2001-04-25
PRIOR PILING DATE: 2000-04-26
PRIOR PILING DATE: 2000-04-26
PRIOR PILING DATE: 2000-04-26
PRIOR PILING DATE: 2000-05-19
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
                              S
                                                                                                                                  ક
                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Remaining Prior Application data removed -
NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 26
LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Chun, Miyoung
APPLICANT: TBai, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 09/816,494
FILING DATE: 2001-03-23
APPLICATION NUMBER: US 09/815,419
FILING DATE: 2001-03-22
                                 361
                                                                                   301
                                                                                                                                     301
                                                                                                                                                                                             241
                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                          121 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Curtis, Rory A.J.
Logan, Thomas Joseph
Glucksmann, Maria A.
Meyers, Rachel E.
Williamson, Mark J.
Rudolph-Owen, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DKYLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                  QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                          LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                         LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN 300
                                                                                                                                                                                                                                                                                                       QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEXILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                           LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99.6%; Score 3406; DB 16; 99.7%; Pred. No. 9e-238; ltive 1; Mismatches ·1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  See File Wrapper or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                        360
                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                   360
                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
```

```
JESUL.
US-10-072-UL.
Sequence 679, Appl.
Publication No. US2004UU..
GENERAL INFORMATION:
APPLICANT: Tchernev, Velizar
APPLICANT: Spytek, Kimberly
APPLICANT: Serhusen, Bryan
APPLICANT: Terhusen, Bryan
APPLICANT: Serhusen Bichar
                APPLICANT: Burgess, Catherine E.
FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR FILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR PILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR PILING DATE: 2001-01-31
PRIOR PILING DATE: 2001-01-31
PRIOR PILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR PILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR PILING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR PILING DATE: 2001-02-05
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
OR FILING DATE: 2001-01-31
OR APPLICATION NUMBER: 60/266,406
OR FILING DATE: 2001-02-05
OR APPLICATION NUMBER: 60/267,057
OR FILING DATE: 2001-02-05
OR APPLICATION NUMBER: 60/267,057
OR FILING DATE: 2001-02-07
OR APPLICATION NUMBER: 60/266,975
OR APPLICATION NUMBER: 60/266,975
OR FILING DATE: 2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rastelli, Luca
Miller, Charles E.
Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SKRIHSVRTSSSGTAQRSILSPIHRSGSVEDNYHTSFIFGISTSQQHLTKSAGIGIKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Lepley, Denise M. Rieger, Daniel K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Padigaru, Muralidhara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gangolli, Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/10072012 o. US20040033493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  David W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
```

```
RESULT 12
US-10-072-012-703
; Sequence 703, Application US/10072012
; Publication No. US20040033493A1
; GENERAL INFORMATION:
; APPLICANT: Tcherney, Velizar
; APPLICANT: Spytek, Kimberly
; APPLICANT: Zerhusen, Bryan
; APPLICANT: Patturajan, Meera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 2001-02-08

Remaining Prior Application data removed - See
NUMBER OF SEQ ID NOS: 1391

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 679
LENGTH: 690
TYPE: PRT
ORGANISM: Homo sapiens
US-10-072-012-679
                                                                                                                                                                                       S
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                               ᅜ
                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity 99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/267,459
                                                                                                                                                                                               661
                                                                                                                                                                                                                            626
                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                       566
                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                  506
                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                          446
                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                   IIEVS
                                                                                                                                                                                               IIEVS
                                                                                                                                                                                                                                               QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                 SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                     SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                             SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLFVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                           QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                              SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                      SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                          SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QQNGIGYYLNASYTCPKPDF1PESHFLRVPVNDSPCEK1LPWLDKSVDF1EKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DKVLITELIOHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                    690
                                                                                                                                                                                               665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 3406; DB 15;
Pred. No. 9.5e-238;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              See File Wrapper or PALM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ç,
                                                                                                                                                                                                                                                                                                                                                                                                    505
                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                              565
                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                           685
                                                                                                                                                                                                                                                                                    625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                               445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
```

```
Ś
                                         ₽
                                                                              $
                                                                                                                                  밁
                                                                                                                                                                          S
                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-072-012-703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILING DATE: 2001-01-31
PRIOR PILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR PILING DATE: 2001-02-02
PRIOR PILING DATE: 2001-02-05
PRIOR PILING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Pat
SEQ ID NO 703
LENGTH: 690
                                                                                                                                                                                                                                                                                                                                                                                                    Matches 663;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Remaining Prior Application data removed NUMBER OF SEQ ID NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                     146
      241
                                                206
                                                                                       181
                                                                                                                                                                              121
                                                                                                                                                                                                                          86
                                                                                                                                                                                                                                              61 DKYLITELIQHSAKHKYDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                               26
                                                                                                                                                                                                                                                                                                                                 1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PatentIn
                                                                                                                                                            LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                                                                                                LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                           QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                     DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                            MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Lepley, Denise M.
Rieger, Daniel K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Furtak, Katarzyna
Grosse, William M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gerlach, Valerie
Taupier Jr, Raymond
Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alsobrook II, John P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rastelli, Luca
Miller, Charles E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Padigaru,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Anderson,
                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                    99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         David W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Muralidhara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3
                                                                                                                                                                                                                                                                                                                                                                                               Score 3406; DB 15;
Pred. No. 9.5e-238;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ı
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          See File Wrapper or
                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PALM
                                                                                                                                                                                                                                                                                                                                                                                               Gaps
  300
                                           265
                                                                                       240
                                                                                                                                  205
                                                                                                                                                                          180
                                                                                                                                                                                                                     145
                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                            85
                                                                                                                                                                                                                                                                                                                                                                                               0
```

325

480

385 420 445

```
Sequence 54204, Application US/10425114

Publication No. US20040034888A1

GENERAL INFORMATION:
APPLICANT: Liu, Jingdong
APPLICANT: Zhou, Yihua
APPLICANT: Screen, Steven E
APPLICANT: Screen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53313)B
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 73128
BEQ ID NO 54204
LENGTH: 690
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                       문
                                                            S
                                                                                                                                         ঠ
                                                                                                                                                                             밁
                                                                                                                                                                                                       र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-425-114-54204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           श
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 663; Conserv
                                                                                                                                                                                                                                                                                                                        FEATURE:
OTHER INFORMATION: Clone ID: LIB4119-028-H6_FLI.pep:-10-425-114-54204
                                   146
                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  266 LVHCLAGISRSATIAIAYIMKRMDMSLDBAYRFVKBKRPTISPNFNFLGQLLDYBKKIKN
                                                                                                       98
                                                                                                                                         61
                                                                                                                                                                             26
                                                                                                                                                                                                                                                     663; Conservative
                                                                                                                                                                                                  MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                        DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                             MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OKPSDRADSRRSWHEESPFEKOFKRRSCOMEFGESIMSENRSREELGKVGSOSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV 385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        665
                                                                                                                                                                                                                                                                  99.6%;
                                                                                                                                                                                                                                                 Score 3406; DB 15;
Pred. No. 9.5e-238;
1; Mismatches 1;
                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                             85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    325
                                                                                                       145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
APPLICANT: HIO, YURI
APPLICANT: NAGAI, KADICHI
APPLICANT: NAGAI, KRIICHI
APPLICANT: NAGAI, KRIICHI
APPLICANT: TAMECHIKA, ICHIRO
APPLICANT: TAMECHIKA, ICHIRO
APPLICANT: OSEKI, NAOHIKO
APPLICANT: OSEKI, NAOHIKO
APPLICANT: OTSUKA, MOTOYUKI
APPLICANT: NAGAHARI, KENJI
APPLICANT: MASUHO, YASUHIKO
TITLE OF INVENTION: NOVEL FULL-LENGTH CDNA
FILE REFERENCE: 084335/0160
CURRENT APPLICATION NUMBER: US/10/094,749
CURRENT APPLICATION NUMBER: US/10/094,749
CURRENT APPLICATION NUMBER: 60/350,435
PRIOR APPLICATION NUMBER: 60/350,435
PRIOR APPLICATION NUMBER: JP 2001-328381
PRIOR FILING DATE: 2001-09-14
NUMBER OF SEQ ID NOS: 3381
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 2312
LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: ISOGAI, 7
APPLICANT: SUGIYANU
APPLICANT: OTSUKI,
APPLICANT: WAKAMATE
APPLICANT: SATO, HI
APPLICANT: ISHII, E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 2312, Application US/10094749 Publication No. US20030219741A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTSUKI, TETSUJI
WAKAMATSU, AI
SATO, HIROYUKI
ISHII, SHIZUKO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PSVPSV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SUGIYAMA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                     YAMAMOTO, JUN-ICHI
                                                                                                                                                                                                                                                                                                                                                                                                                              ISONO, YUUKO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /QPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAKAO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOMOYASU
```

```
RESULT 15
US-10-072-012-681
US-10-072-012-681
; Sequence 681, Application US/10072012
; Publication No. US20040033493A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Homo sapiens
US-10-094-749-2312
APPLICANT: Tchernev, Velizar
APPLICANT: Spytek, Kimberly
APPLICANT: Spytek, Ryan
APPLICANT: Zerhusen, Bryan
APPLICANT: Patturajan, Meera
APPLICANT: Shimkets, Richard
APPLICANT: Li, Li
APPLICANT: Li, Li
APPLICANT: Gangolli, Esha
APPLICANT: Anderson, David W.
APPLICANT: Raderson, David W.
APPLICANT: Miller, Charles B.
APPLICANT: Miller, Charles B.
APPLICANT: Gerlach, Valerie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 662; Conserv
                                                                                                                                                                                                                                                                                   199
                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
Li, Li
Gangolli, Esha
Padigaru, Muralidhara
Anderson, David W.
Rastelli, Luca
Miller, Charles E.
Gerlach, Valerie
                                                                                                                                                                                                                                                           IIEVS
                                                                                                                                                                                                                                                                                  IIEVS
                                                                                                                                                                                                                                                                                                                                                               SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                             SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                   SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSPLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                          QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                   SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                            QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTLILPNLYLGCQRDVLNKELM
                                                                                            Patturajan, Meera
Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                     665
                                                                                                                                                                                                                                                           665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 3399; DB 15;
Pred. No. 2.9e-237;
1; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                              660
                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                         밁
                                            Ş
                                                                            밁
                                                                                                   Ś
                                                                                                                                밁
                                                                                                                                                       S
                                                                                                                                                                                     맑
                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                             멼
                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                  Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                          301
                                                301
                                                                              241
                                                                                                       241
                                                                                                                                                            181
361
                                                                                                                                  181
                                                                                                                                                                                       121
                                                                                                                                                                                                                121
                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                  61
```

```
; SOFTWARE: PatentIn Ver. 2; SEQ ID NO 681; LENGTH: 665; TYPE: PRT; ORGANISM: Homo sapiens US-10-072-012-681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: MIEGEL, DELICEL N.
APPLICANT: MIEGES, CATHERINE E.
FILE REFERENCE: 21402-258
CURRENT APPLICATION UNMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR PILLING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR FILING DATE: 2001-01-31
PRIOR PELLING DATE: 2001-01-31
PRIOR PELLING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR PILLING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR PILLING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR PILLING DATE: 2001-02-07
PRIOR PILLING DATE: 2001-02-07
PRIOR PILLING DATE: 2001-02-07
PRIOR PILLING DATE: 2001-02-07
PRIOR PILLING DATE: 2001-02-07
PRIOR PILLING DATE: 2001-02-07
PRIOR PILLING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR PILLING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEQ ID NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Sim hes 662;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                   DKVLITELIQHSAKHKVDIDCSQKVVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                         LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                    QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                         QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                                                                                                                                                                                                                                                                                                                                                                                                                             DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                           LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                        QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                      LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTLILPNLYLGCQRDVLNKELM
                                             QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Furtak, Katarzyna
Grosse, William M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wolenc,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lepley, Denise M. Rieger, Daniel K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Taupier Jr, Raymond J. Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alsobrook II, John P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Colman,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Steven D.
Adam R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 3399; DB 15;
Pred. No. 2.9e-237;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
420
                                                                                           360
                                                                                                                                           300
                                                                                                                                                                                           300
                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
```

QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
SSEDALEYYKPSTTLDGTNKLCQPSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ

Search completed: February 9, 2005, 12:28:41 Job time : 128.848 secs

This Page Blank (uspto)

Sequence Sequence Sequence Sequence

,09

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                       445
439.5
433
425
                                                                                                    3406
654.5
654.5
654.5
654.5
674.5
470.19
470.19
470.19
470.19
470.19
470.19
445.3
445.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Issued_Patents_AA:*

1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/FCTUS_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-029-345A-109
3418
1 MAHEMIGTQIVTERLV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     513545 seqs,
    299.6
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
1199.1
119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 February 9,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MAHEMIGTQIVTERLVALLE...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
    GenCore version (c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2005, 12:00:17; Search time 42.637 Seconds (without alignments)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       74649064 residues
US-09-916-494-2
US-09-949-016-9121
US-09-544-716-114
US-09-557-921-15
US-09-564-357-17
US-09-519-380-16
US-09-955-732A-6
US-09-955-732A-6
US-09-949-016-8486
US-09-9736-457-805
US-09-736-457-805
US-09-614-124B-805
US-09-614-124B-805
US-09-618-24-805
US-09-618-24-805
US-09-618-24-805
US-09-618-24-805
US-09-618-24-807
US-09-618-24-807
US-09-618-24-827
US-09-618-24-827
US-09-618-24-827
US-09-618-24-827
US-09-618-24-827
US-09-619-379-6
US-09-949-016-8081
US-08-930-379-6
US-09-990-379-6
US-09-990-379-6
US-09-990-379-6
US-09-990-379-6
US-09-990-379-6
US-09-990-379-6
US-09-990-379-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          .....LGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (without alignments)
1164.285 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Compugen
                                                        Sequence 2, Appli Sequence 11, Appl Sequence 11, Appl Sequence 11, Appl Sequence 16, Appli Sequence 16, Appli Sequence 2, Appli Sequence 805, Appli Sequence 805, Appli Sequence 805, App Sequence 805, App Sequence 805, App Sequence 805, App Sequence 807, App Sequence 807, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequence 827, App Sequen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Description
                Sequence
Sequence
  5,
11,
24,
Appli
Appli
Appli
Appl
Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2, Application US/09816494

Patent No. 6664089

GENERAL INFORMATION:

APPLICANT: Meyers, Rachel A.

TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR FILE REFERENCE: 10448-030002

CURRENT APPLICATION NUMBER: US/09/816,494

CURRENT FILING DATE: 2001-03-23

PRIOR APPLICATION NUMBER: US 60/191,858

PRIOR FILING DATE: 2000-03-24

NUMBER OF SEQ ID NOS: 10

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 2

LENGTH: 665

TYPE: PRT

ORGANISM: Homo sapiens
                                 밁
                                                                       S
                                                                                                                       밁
                                                                                                                                                   ঠ
                                                                                                                                                                                        밁
                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1
US-09-816-494-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                               301
                                                                                                                         241
                                                                                                                                                             241
                                                                                                                                                                                                     181
                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                     121
    361
                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                   13
                                                                                                                                                                                                                                                                                                                                                                                                        13
                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                      QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                            LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                   QQQGIGYYLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDXSVDFIEKAKASNGCV
    PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                         LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                          QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-919-497-60
US-09-949-016-10488
US-09-949-016-10488
US-08-990-379-7
US-09-164-193-22
US-08-990-379-4
US-09-702-705-806
US-09-702-705-806
US-09-614-124B-806
US-09-614-124B-806
US-09-658-824-806
US-09-658-824-806
US-09-658-824-806
US-09-69-80-113
US-09-564-357-16
```

Score 3406; DB 4; Pred. No. 9.9e-288; 1; Mismatches 1;

Length Indels

665;

0;

Gaps

0

420

360

300

240 240

360

180 180 120

120 60 Regult No.

Database

Minimum DB Maximum DB

ALIGNMENTS

Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence Sequence

10840, A
1088, Appli
22, Appli
22, Appl
4, Appli
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App
806, App

Sequence:

480

514

625

413

437

```
APPLICANT: VENTER, J. Craig et al.

APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

FILE REFERENCE: CL001307

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR FILING DATE: 2000-10-20

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-09-08

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-09-08

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-10-10

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-10-10

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 207011

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-10-10

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-10-10

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-10-10

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-10-10

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10

PRIOR FILING DATE: 2000-10-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 2
US-09-949-016-9121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 9121, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Human
-09-949-016-9121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
                                             277
                                                                                                                                         217
                                                                                                                                                           157
                                                                                                                                                                                                                                                          314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                     97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                  37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Similarity
                                   MAHEMIGTQIV-TERLVALLESGTEKVLLIDSRÞFVEYNTSHILEAININCSKLMKRRLQ 59
                                                                                                                                                                                                                                                                                                                           QKVTIAELIQPAARSQVEATEPQDVVVYDQSTRDASVLAADSFLSILLSKLDGCFDSVA
                                                                                                                                                                                                                                                                                                                                                          QDKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVH
                                                                                                                                    LMTQNGISYVLNASNSCPKPDFICESRFMRVPINDNYCEKLLPWLDKSIEFIDKAKLSSC
                                                                                                                                                                                                                                 ILTGGFATFSSCFPGLCEGKPAALLPMSLSQPCLPVPSVGLTRILPHLYLGSQKDVLNKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREBLGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     38.7%; Score 1324; DB 4;
45.1%; Pred. No. 2.4e-106;
tive 93; Mismatches 186;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 661;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          104;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                  276
                                                                                                                                                                                                                                 216
                                                                                                                                                                                                                                                                              178
                                                                                                                                                                                                                                                                                                                              156
                                                                                                                                                                                                                                                                                                                                                                           119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
RESULT 4
US-09-557-921-15
Sequence 15, Application US/09557921
Sequence 15, Application US/09557921
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: We1, B0
TITLE OF INVENTION: DSP-10 DUAL-SPEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Luche, Ralf M.

APPLICANT: Wei, Bo

APPLICANT: Wei, Bo

ITTLE OF INVENTION: DSP-9 DUAL-SPECIFICITY

FILE REFERENCE: 200125.415

CURRENT APPLICATION NUMBER: US/09/544,716

CURRENT FILING DATE: 2000-04-10

NUMBER OF SEQ ID NOS: 20

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 14
                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; LENGTH: 170
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-544-716-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 3
US-09-544-716-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 14, Application Patent No. 6492157 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             414
                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       299
                                                                                                                                                                                                                                                                                                                                             TIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNF1GQLLDYEKKIK 299
                                                                                                                                                                                                                                              TIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERTLK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MEFGESIMSENRSR-EELGKVGSOSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAQGAGGVLFAPFGRAGAPGPGGGSDLRRREAARAEPRDARTGWPEEPAPETQFKRRSCQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSWHEESPFEKQFKRRSCQ 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        :aggeppapetppa---TSALQQGLRGLHLSSDRLQDTNRLKRSFSLDIKSA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KNQTGASGPKSKLKLLHLEKPN---EPVPAVSEGGQKSETPLSPPCADSAT--SEAAGQR 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AARQTPRHGLSALSAPGLPGPGQPAGPGAWAPPLDSP--GTPSPDGPWCFSPE-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 --LSTSQQHLTKSAGLGLKG------WHSDILAPQTSTPSLTSSWYFATESSHFYSA 569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAPDARPRPRRPRP-------PAGSPAR---SPAHSLG------LNFGD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              KEEASI PKKLQTARPSDSQSKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PVHPASVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AASLHGFSSSEDALEYYKPSTTLDGTN-----KLCQF-SP---VQELSEQTPETSPD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KLLAALQGDPG-----TPSGTPEPPPSPAAGAPLPRLP--PPTSESAATGNAAREG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19.1%; Score 654.5; DB 4 ilarity 72.5%; Pred. No. 5.6e-49; Conservative 27; Mismatches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DSP-9 DUAL-SPECIFICITY
          DSP-10 DUAL-SPECIFICITY PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ----YAPSMRPDGPGPPDPGEAPKLCKLDSPSGAALGLSSPIPD-SPD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US/09544716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 170;
```

1:

Gaps

120 252 60 밁 S 밁 Ś 밁 Ś 밁 Ś 문 δ 맑

Ś 밁 S 밁 5 망 Ś 8 5

```
RESULT 6
US-09-619-380-16
                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                       र्
                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                       र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; TYPE: PRT
; ORGANISM: Homo
US-09-564-357-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 5
US-09-564-357-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                皮
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; TYPE: PRT ; ORGANISM: Homo sapiens US-09-557-921-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-5 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125.413
CURRENT APPLICATION NUMBER: US/09/564,357
CURRENT FILING DATE: 2000-04-24
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                          Sequence 16, Application Patent No. 6649391
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PILE REFERENCE: 200125.416
CURRENT APPLICATION NUMBER: US/09/557,921
CURRENT FILING DATE: 2000-04-20
NUMBER OF SEQ ID NOS: 20
SOPTWARE: PASTSEQ for Windows Version 4.1
SEQ ID NO 15
LENGTH: 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17, Application Patent No. 6645753
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
APPLICANT: Luche, Ralf M. APPLICANT: Wei, Bo TITLE OF INVENTION: DSP-11 PILE REPERENCE: 200125.418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 170
                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity 72.5
les 121; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Match 19.1%; Score 654.5; DB 4; Local Similarity 72.5%; Pred. No. 5.6e-49;
                                                                                                                                                                                                              253 TIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
||||||||||||||||::||:|||||||||||::|
121 TIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERTLK 167
                                                                                                                                                                                                                                                                                                             193 YTCPKPDFIPESHFLRVFVNDSFCEKILFWLDKSVDFIEKAKASNGCVLVHCLAGISRSA 252
                                                                                                                                                                                                                                                                                                                                                                                         134 GLCEGK-STLVPTCISQPCLFVANIGPTRILPNLYLGCQRDVLNKELIQQNGIGYVLNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       253 TIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                134 GLCEGK-STLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELIQQNGIGYVLNAS
                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    YTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSA 252
                                                                                                                                                                                                                                                                                             NSCPKPDFICESRFMRVPINDNYCEKLLPWLDKSIEFIDKAKLSSCQVIVHCLAGISRSA
                                                                                                                                                                                                                                                                                                                                                                       GLCEGKPAALLPMSLSQPCLPVPSVGLTRILPHLYLGSQKDVLNKDLMTQNGISYVLNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TIAIAYIMKTMGMSSDDAYRFVKDRRÞSISÞNFNFLGQLLEYERTLK 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NSCPKPDFICESRFMRVPINDNYCEKLLPWLDKSIEFIDKAKLSSCQVIVHCLAGISRSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GLCEGKPAALLPMSLSQPCLPVPSVGLTRILPHLYLGSQKDVLNKDLMTQNGISYVLNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                               19.1%; Score 654.5; DB 4
72.5%; Pred. No. 5.6e-49;
ative 27; Mismatches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/09564357
                                                                                                                      US/09619380
                      DUAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27;
                        SPECIFICITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 170;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 170;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                             192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  192
                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
```

```
NUMBER OF SEQ ID NOS: 22

SOFTWARE: PastSEQ for Windows Version 4.
SEQ ID NO 16
LENGTH: 170
TYPE: PRT
ORGANISM: Homo sapiens
US-09-619-380-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; LENGTH: 155
; TYPE: PRT
; ORGANISM: Homo &
US-09-955-732A-6
                                                                                                                                              US-09-949-016-8486
                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-955-732A-6
Sequence 8486, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 29
SOFTWARE: FastSEQ for Windows Version SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 6, Application Patent No. 6825021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-15 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125.433
CURRENT APPLICATION NUMBER: US/09/955,732A
CURRENT FILING DATE: 2001-09-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/619,380
CURRENT FILING DATE: 2000-07-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local
                                                                                                                                                                                                                                       267 LDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                               207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                147 ISQPCLPVANIGPTRILPNLYLGCQRDVLNKELIQQNGIGYVLNASYTCPKPDFIPESHF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                253 TIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     193 YTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSA 252
                                                                                                                                                                                                                                                                                         61 MRVPINDNYCEKLLPWLDKSIEFIDKAKLSSCQVIVHCLAGISRSATIAIAYIMKTMGMS
                                                                                                                                                                                                                                                                                                                                                                                                                                        113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 NSCPKPDFICESRFMRVPINDNYCEKLLPWLDKSIEFIDKAKLSSCQVIVHCLAGISRSA
                                                                                                                                                                                                                                                                                                                                                                 1 LSQPCLPVPSVGLTRILPHLYLGSQKDVLNKDLMTQNGISYVLNASNSCPKPDFICESRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                              LRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSATIAIAYIMKRMDMS 266
                                                                                                                                                                                                                      SDDAYRFVKDRRPSISPNFNFLGQLLEYERTLK 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERTLK 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19.1%; Score 654.5; DB 4 ilarity 72.5%; Pred. No. 5.6e-49; Conservative 27; Mismatches 18
                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                    18.1%; Score 619; DB 4
73.9%; Pred. No. 6e-46;
tive 25; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US/09955732A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 4; Length 155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                        15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 170;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                   6
                                                                                                                                                                                                                                                                                                                                                                                                      206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                      0
```

```
; LENGTH: 482
; TYPE: PRT
; ORGANISM: Homo s
US-09-557-921-2
                   S
                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 9
US-09-557-921-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; ORGANISM: Human
US-09-949-016-8486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR PPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR PPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 207012
                                                                                                                                                                                                                                     SOFTWARE:
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                          Sequence 2, Application US/09557921
Patent No. 6551810
GENERAL INFORMATION:
                                                                                                                Matches
                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
Matches 113; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FASTSEQ for Windows Version
SEQ ID NO 8486
LENGTH: 491
                                                                                                                                                                                                                                                                APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125.416
FURRENT APPLICATION NUMBER: US/09/557,921
CURRENT FILLING DATE: 200-04-20
NUMBER OF SEQ ID NOS: 20
NUMBER OF SEQ ID NOS: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
                                                                                                                            Local Similarity
                                                                                                                107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         315 SFPVEILPFLYLGCAKDSTNLDVLEEFGIKYILNVTPNLPNLFENAGEFKYKQIPISDHW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         257
136 CEGKSTLVPTC-ISOPCLPVANIG------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               197 TRRCGTDTVVLYDESSSDWNENTGGESVLGLLLKKLKDEGCRAFYLEGGFSKFQAEFSLH 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          78 DIDC-SQKVVVYDQSSQD-VASLSSDCFLTVLLGKLEKSFNSVHLLAGGFAEFSRCFPGL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19 LESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELIQHSA-KHKV
                                                                                                                                                                                                                                                     FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  EKRPTISPNFNFLGQLLDYEKKIKNQTGASGP 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SQNLSQFFPEAISFIDEARGKNCGVLVHCLAGISRSVTVTVAYLMQKLNLSMNDAYDIVK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    --PTRILPNLYLGCORDVLNKELIQONGIGYVLNASYTCPKP-DFIPESHFLRVPVNDSF 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CEKILPWLDKSVDFIEKAKASNGCYLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVK 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CE--TNLDGSCSSSSPPLPVLGLGGLRISSDSSSDIESDLDRDPNSATDSDGSPLSNSQP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LELGNERLLIMDCRPQELYESSHIESAINVAIPGIMLRRLQKGNLPVRALFTRGEDRDRF 196
                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                        13.7%; Score 469; DB 4; Length 482; 35.9%; Pred. No. 4.5e-32; rative 65; Mismatches 96; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        13.8%; Score 470.5; DB 4; Length 34.0%; Pred. No. 3.4e-32; ative 63; Mismatches 107; Indels
                                                                                                            30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   158
                         5
                                                           밁
                                                                                       Ś
                                                                                                                       문
                                                                                                                                                  Ś
                                                                                                                                                                                    밁
                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-702-705-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 10
US-09-702-705-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ㅁ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 31.4%;
Matches 120; Conservative 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Homo sapiens
                                                                                          300
                                                                                                                                                                                                                   180
                                                                                                                                                                                    217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   407
                                                                                                                                                                                                                                                                                                           97
                                                                                                                                                                                                                                                                                                                                                                          39
 VHSAPSSLPYL--HSPITTSPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wang, Tongtong
Bangur, Chaitanya;
Lodes, Michael A.
Fanger, Gary
Vedvick, Tom
```

```
APPLICANT: Carter, Darrick
APPLICANT: Retter, Marc
APPLICANT: Mannion, Jane
APPLICANT: Fan, Liqun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOI
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 201011.478014
CURRENT APPLICATION NUMBER: US/09/702,705
CURRENT FILING DATE: 2000-10-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 1833
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 805
LENGTH: 394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 805, Application US/09702705 Patent No. 6504010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     157 FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19 LESGTEKVILIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVILITELI--QHSAKHK 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   233 IIVYDENTNEPSRVMPSQPLHIVLESLKREGKEPLVLKGGLSSFKQNHENLCDNSLQLQE
                                                                                                                                                                                                                                  VLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                LDALGITALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR
VPSVPSVQPSLLEDSPLVQALS 381
                                                                                                                                                                                                                                                                                                                                                                                            IQQNGIGYVLNASYTCEKEDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VDIDCSQKVVVYDQSSQDVASISSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG 134
                                                                  ATSCAAEAAS-----PSGPL-----GERGKTPATP----TSQFVFSFPV-SVG 373
                                                                                                                             NQTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPAS
                                                                                                                                                                                               VLVHCQAGISRSATICLAYLMKKRVRLEEAFEFVKQRRSIISPNFSFMGQLLQFESQVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LCEGKSTL-----VPTCISQP----CLPVA-----NIGPTRILPNLYLGCQRDVLNKEL 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HCQAGVSRSATIVIAYLMKHTRMTWTDAYKFVKGKRPIISPNLNFMGQLLEFEEDLNN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LPSG-GKCLLLDCRPFLAHSAGYILGSVNVRCNTIVRRR-AKGSVSLEQILPAEEEVRAR 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VINVTTHLPLYHYEKGLF----NYKRLPATDSNKQNLRQYFEEAFEFIEEAHQCGKGLLI 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VLNAS-----YTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLV 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CREVGGGASAASSLLPQPI--PTTPDIENAELTPILPFLFLGNEQDAQDLDTMQRLNIGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----STLVPTCISQPCLP-VANIGPTRILPNLYLGCQRDVLNKELIQQNGIGY 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Score 453; DB 4; I; Pred. No. 8e-31; 73; Mismatches 143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 4; Length 394;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FOR THE THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    464
                                                                                                                                 359
                                                                                                                                                                                                                                                                                                                                    275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      350
```

```
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER FILE REFERENCE: 210121.478C15
CURRENT APPLICATION NUMBER: US/09/736,457
CURRENT FILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 1864
SOPTWARE: PASTSEQ for Windows Version 3.0
SEQ ID NO 805
LENGTH: 394
TYPE: PRT
ORGANISM: Homo Sapiens
                                                                                                                        RESULT 12
US-09-614-124B-805
                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                            뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
              GENERAL INFORMATION:
APPLICANT: Wang, Ton;
APPLICANT: Bangur, of
APPLICANT: Lodes, Mi
APPLICANT: Fanger, of
                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 11
US-09-736-457-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Wang, To
APPLICANT: Bangur,
APPLICANT: Lodes, M.
                                                                                           Sequence 805, Application US/09614124B Patent No. 6630574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 805, Application US/09736457 Patent No. 6509448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -09-736-457-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                         374
                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                    336
                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                  276
                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                           217 LDALGITALLNVSSDCPN-HFEGHYOYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR
                                                                                                                                                                                                                                                                                                                                                                                                                                            157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    39
                                                                                                                                                                                                                     VPSVPSVQPSLLEDSPLVQALS 381
                                                                                                                                                                                                                                                                                                                                VLVHCLAGISRSATIAIAYIMKRMDMSLDEAYREVKEKRPTISENENELGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                                     IQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LPSG-GKCLLLDCRPFLAHSAGYILGSVNVRCNTIVRRR-AKGSVSLEQILPAEEEVRAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELI--QHSAKHK 76
Bangur, Chaitan
Lodes, Michael J
Fanger, Gary
Vedvick, Tom
                                                                                                                                                                                                                                                    ATSCAAEAAS-----PSGPL-----GERGKTPATP----TSQFVFSFPV-SVG
                                                                                                                                                                                                                                                                                 NQTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPAS 359
                                                                                                                                                                                                                                                                                                              VLVHCQAGISRSATICLAYLMMKKRVRLEEAFEFVKQRRSIISPNFSFMGQLLQFESQVL
                                                                                                                                                                                                                                                                                                                                                                                                                                        FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LCEGKSTL-----VPTCISQP----CLPVA-----NIGPTRILPNLYLGCQRDVLNKEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LRSGLYSAVIVYDERSPRABSLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     VDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wang, Aijun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Carter, Darrick
Retter, Marc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fanger, Gary
Vedvick, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Wang, Tongtong
Bangur, Chaitanya S.
Lodes, Michael A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fan, Liqun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mannion, Jane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                             Tongtong
ur, Chaitanya S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13.3%; Score 453; DB 4; Length 394; 31.4%; Pred. No. 8e-31; tive 73; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FOR THE THERAPY AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                46;
                                                                                                                                                                                                                                                                                                                335
                                                                                                                                                                                                                                                                                                                                                                            275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       179
                                                                                                                                                                                                                                                                                                                                                                                                         239
                                                                                                                                                                                                                                                                                                                                                                                                                                          216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    96
                                                                                                                                                                                                                                                                                                                                                            RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     묽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
```

```
RETTER OF INVENTION NUMBER: US/09/671,325
CURRENT FILL DATE
CURRENT FILL DATE
CURRENT FILL DATE
CURRENT FILL DATE
CURRENT FILL PAPLICATION NUMBER: US/09/671,325
CURRENT FILL DATE
CURRENT FILL DATE
SEQ ID NOS: 1825
SOFTWARE: FRSESEQ for Windows
SEQ ID NO 805
LENGTH: 394
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; APPLICANT: Carter, Darrick
; APPLICANT: Retter, Marc
; APPLICANT: Mannion, Jane
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
; FILE REFERENCE: 210121.478C9
; CURRENT APPLICATION NUMBER: US/09/614,124B
; CURRENT FILING DATE: 2001-07-11
; NUMBER OF SEQ ID NOS: 1668
; SOTTWARE: FRSELSEQ for Windows Version 3.0
; SEQ ID NO 805
LENGTH: 394
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-614-124B-805
                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-671-325-805
; Sequence 805, Application US/09671325
; Patent No. 6667154
                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION: APPLICANT: Wang, T
                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19 LESGTEKVLLIDSRPFVBYNTSHILEAININCSKLMKRRLQQDKVLITELI--QHSAKHK
                                                                                                                                                                                                                                                                       Bangur, Chaitanya &
Lodes, Michael A.
Fanger, Gary
Vedvick, Tom
Carter, Darrick
Retter, Marc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VLVHCQAGISRSATICLAYLMMKKRVKLEEAFEFVKQRRSIISPNFSFMGQLLQFESQVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              VLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LPSG-GKCLLLDCRPFLAHSAGYILGSVNVRCNTIVRRR-AKGSVSLEQILPAEEEVRAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VPSVPSVQPSLLEDSPLVQALS 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATSCAAEAAS-----PSGPL-----GERGKTPATP----TSQFVFSFPV-SVG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NOTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LDALGITALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LCEGKSTL-----VPTCISQP----CLPVA----NIGPTRILPNLYLGCQRDVLNKEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VHSAPSSLPYL--HSPITTSPS 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           VDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG 134
                                                                                                                                                                                                                                                                                                                                                                                                  Wang, Tongtong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                              COMPOSITIONS AND METHODS DIAGNOSIS OF LUNG CANCER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13.3%; Score 453; DB 4
31.4%; Pred. No. 8e-31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            73;
                                                                                                                                                                                                                                                                                                                                                                               Ø
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 4; Length 394;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  143;
                                                                                                                                                                                                                  FOR THE THERAPY AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             179
```

239 216

275

```
APPLICANT: Mannion, Jane
ITITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
ITITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
ITITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
ITITLE OF INVENTION INVENT: US/09/589,184
CURRENT APPLICATION NUMBER: US/09/589,184
CURRENT FILING DATE: 2000-06-05
NUMBER OF SEQ ID NOS: 827
SOFTWARE: PastSEQ for Windows Version 3.0
SEQ ID NO 805
LENGTH: 394
TYPE: PRT
ORGANISM: Homo sapiens
        밁
                                           Ś
                                                                                       皮
                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 14
US-09-589-184-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; ORGANISM: Homo sapiens US-09-671-325-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                Query Match 13.3%; Score 453; DB 4; Length 394; Best Local Similarity 31.4%; Pred. No. 8e-31; Matches 120; Conservative 73; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 805, Application US/09589184 Patent No. 6686447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                            -09-589-184-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240 VLVHCLAGISRSATIAIAYIMKRWDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       135 LCEGKSTL-----VPTCISQP----CLPVA-----NIGPTRILPNLYLGCQRDVLNKEL 179
        97
                                              77
                                                                                       39
                                                                                                                          19 LESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELI--QHSAKHK 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19 LESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELI--QHSAKHK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             77 VDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG 134
                                       VDIDCSQXVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFFG 134
LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NQTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPAS
                                                                                   LPSG-GKCLLLDCRPFLAHSAGYILGSVNVRCNTIVRRR-AKGSVSLEQILPAEEEVRAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VPSVPSVQPSLLEDSPLVQALS 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATSCAAEAAS-----PSGPL---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VLVHCQAGISRSATICLAYLMMKKRVRLEBAFBFVKQRRSIISPNFSFMGQLLQFBSQVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LDALGITALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                VHSAPSSLPYL--HSPITTSPS 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IQQNGIGYVLNASYTÇEKEDFIPESHFLRVEYNDSFCEKILEWLDXSVDFIEKAKASNGC 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LPSG-GKCLLLDCRPFLAHSAGYILGSVNVRCNTIVRRR-AKGSVSLEQILPAEEEVRAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Carter, Darrick
Retter, Marc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fanger, Gary
Vedvick, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wang, Tongtong
Bangur, Chaitanya S.
Lodes, Michael A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13.3%; Score 453; DB 4; Length 394; ilarity 31.4%; Pred. No. 8e-31; Conservative 73; Mismatches 143; Indels 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GERGKTPATP----TSQFVFSFPV-SVG 373
                                                                                                                                                                    46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                   96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; SEQ ID NO 805
; LENGTH: 394
; TYPE: PRT
; ORCANISM: Homo sapiens
US-09-658-824-805
                                                        S
                                                                                                  밁
                                                                                                                                       Ś
                                                                                                                                                                                     밁
                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                            片
                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: VedVick, Tom
APPLICANT: Carter, Darrick
APPLICANT: Retter, Marc
APPLICANT: Mannion, Jane
APPLICANT: Mannion, Jane
APPLICANT: Mannion, Jane
APPLICANT: Mannion, Jane
APPLICANT: Mannion, Jane
APPLICANT: Fan, Liqun
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C11
CURRENT APPLICATION NUMBER: US/09/658,824
CURRENT FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 1788
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 15
US-09-658-824-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 13.3%;
Best Local Similarity 31.4%;
Matches 120; Conservative 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                        157
                                                                                                                                                                                                                               135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        374 VHSAPSSLPYL--HSPITTSPS 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300 NQTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPAS
                                                                                                                                                                                                                                                                           97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           805, Application US/09658824
o. 6746846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      135
                                                                                                                                                                                                                                                                                                                     77
                                                                                                                                                                                                                                                                                                                                                            39
                                                                                                                                                                                                                                                                                                                                                                                               19 LESGTEKVILIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVILITELI--QHSAKHK 76
                                                                                                                                                                                                                             LCEGKSTL-----VPTCISQP----CLPVA----NIGPTRILPNLYLGCQRDVLNKEL 179
                                                                                                                                                                                                                                                                                                                VDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG 134
                   VLVHCQAGISRSATICLAYLMMKKRVRLEEAFEFVKQRRSIISPNFSFMGQLLQFESQVL
                                       LDALGITALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Wang, Tongtong
Bangur, Chaitanya (
Lodes, Michael A.
Fanger, Gary
                                                                                                                                                                                     FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM
                                                                                                                                                                                                                                                                       LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                            IQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC 239
                                                                                                                                                                                                                                                                                                                                                          LPSG-GKCLLLDCRPFLAHSAGYILGSVNVRCNTIVRRR-AKGSVSLEQILPAEEEVRAR 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATSCAAEAAS-----PSGPL----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VLVHCQAGISRSATICLAYLAWKKRVRLEEAFEFVKQRRSIISPNFSFMGQLLQFESQVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LDALGITALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LCEGKSTL-----VPTCISQP----CLPVA-----NIGPTRILPNLYLGCQRDVLNKEL 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VESVESVOESTIEDSELVOALS 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IQQNGIGYVLNASYTÇPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC
                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Score 453; DB 4; I
; Pred. No. 8e-31;
73; Mismatches 143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -GERGKTPATP----TSQFVFSFPV-SVG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 4; Length 394;
```

FOR

Indels

46;

Gaps

216

Search Job tim	Dъ	Ş	В	ঠ
Search completed: February 9, 2005, 12:13:08 Job time : 43.637 secs	374 VHSAPSSLPYLHSPITTSPS 393	360 VPSVPSVQPSLLEDSPLVQALS 381	336 ATSCAAEAASPSGPLGERGKTPATPTSQFVFSFPV-SVG 373	PKSKLKLLHLEKPNBPVPAVSEG

This Page Blank (uspto)

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -Q=/cgn2_1/USPTO_spool_p/US10029345/runat_09022005_091208_25808/app_query.fasta_1.1294
-QB=Issued_Patenits_Na -QPMT=fastap_-SUFFIX=p2n,rni-mMINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIGT=45 -DCCALIGN=200 -THR_SCORES=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15
-MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000
-USER=US10029345_@CGN 1 1 141 @runat_09022005_091208_25808 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPELOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -MANN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Minimum Match 0% Maximum Match 100%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Command line parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MODEL-frame+
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    82:
                                                                                                                                                                                                                                                                                              Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                  Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    p2n.model -DEV=xlp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Ygapop 6.0 , Fgapext
Fgapop 6.0 , Delext
                                                                                                                                                                                                                  Query
                                                                                                                                                                                                                                                                                                                                                                  1 2 2 4 2 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-029-345A-109
3418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Issued_Patents_NA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1202784 ведв, 818138359 гевідиев
     99.6
99.6
38.8
38.7
23.7
14.0
113.9
113.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MAHEMIGTQIVTERLVALLE.....LGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    February 14, 2005, 09:42:14 ; Search time 293.645 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Copyright
                                                                                                                                                                                                                                                                                                                                                             /cgn2 6/ptodata/1/ina/5A_COMB.seq:*
/cgn2 6/ptodata/1/ina/5B_COMB.seq:*
/cgn2 6/ptodata/1/ina/6A_COMB.seq:*
/cgn2 6/ptodata/1/ina/6A_COMB.seq:*
/cgn2 6/ptodata/1/ina/6B_COMB.seq:*
/cgn2 6/ptodata/1/ina/backfiles1.seq:*
                                                                                                                                                                                                                Length
   1998
3544
2377
2378
2109
2109
2109
2475
333
1830
1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GenCore version 5.1.6 (c) 1993 - 2005 Compus
                                                                                                                                                                                                                  DB
               SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0.5
7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (without alignments)
3705.573 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2405568
                                                                                               Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                  Description
                                Sequence
Sequence
                                                                 Sequence
Sequence
               Sequence
                                                                                                                                                                                  Sequence
3, Appli
3, Appli
3, Appli
3250, Ap
11492, A
11492, Ap
946, App
2615, Ap
2877, Ap
1, Appli
1, Appli
1, Appli
1, Appli
1, Appli
1, Appli
1, Appli
1, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   665
```

45	44	3	2	41	40	39	38	37	36	35	3	ü	32	3	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13
82.	382.5	82.	82.	82.	8	•	N	427.5	27.	28.	28.	28.	445	4	50.	•	50.	50.	50.	50.	50.	50.	50.	50.	50.		50.	51.	υī	U	453	U
11.2	•	•	•	•	•	•	•	12.5		•	•	•	•	•	•	13.2		Ü	ω.	13.2	ω.	Ψ	•	13.2	•	ω	۳	۳	ω.	ω	13.3	ω
1619	1619	1619	1619	1619	2473	1987	944	2303	2283	2015	2000	2000	1238	1993	2363	2109	2109	2109	2109	2109	2109	2064	2064	2064	2064	2064	2064	2240	1238	1238	1238	1238
4.	4	4	4	4	4	N	4	4	4	4	4	4	ຎ	N	4	4	4.	4	4.	4.	4.	4.	4	4	4	4	4	4	4	4	4	4.
89-1	-09-671-325-6	-09-614-124E	-09-736-457-	-09-702-705-	9-949-	-08-990-379-	-09-371-67	-09-922-14	-09-949-01	-09-949-016-496	-919-497-1	-09-016-434-	30-290-	-08-990-379-	-09-949-016-	-09-658-824-82	-09-589-184-82	-09-671-325-82	-09-614-124B-8	-09-736-457-82	-705-82	-09-658-824-82	-09-589	-09-671-325-82	-09-614-124B-8	-09-736-457	-09-702-705-	-09-016	-09-658-824-80	9	-09-671-325-80	9-614
equence 6	e 803	equence 801	e 80:	equence 80:	e 623	equence 1,	equence 10,	equence 3,	e 46:	e 49	e 10,	e 129	e 11	e 2,	e 22:	e 82	820	e 82	82	Sequence 826, App	821	82	82	82	82	82	82	11	80	80	Sequence 803, App	80

ALIGNMENTS

```
ક
                                   멼
                                                                     Ś
                                                                                                         US-10-029-345A-109 (1-665) x US-09-816-494-3 (1-1998)
                                                                                                                                                                                                                       Score:
                                                                                                                                                            Query Match:
                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                      Pred. No.:
                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                           US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 3, Application US/09816494
Patent No. 6664089
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
                                                                                                                                                                                                                                                                                                                         LENGTH: 19
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: 10448-030002
                                                                                                                                                                                                                                                                                                            ORGANISM: Homo
 21
                                                                                                                                                                                                                                                                                                                                                1998
SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40
                                                          MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                            0
3406.00
99.85%
99.70%
99.65%
                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                           Gaps:
                                                                                                                                               00+
```

```
S
                                   뭐
                                                 S
                                                                        В
                                                                                         Ś
                                                                                                         당
                                                                                                                            Ś
                                                                                                                                                    В
                                                                                                                                                                    S
                                                                                                                                                                                           В
                                                                                                                                                                                                           S
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                   닭
                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               묽
                                                                         1021
                                   1081
                                                                                                               961
               381
                                                    361
                                                                                          341
                                                                                                                                  321
                                                                                                                                                      901
                                                                                                                                                                         301
                                                                                                                                                                                             841
                                                                                                                                                                                                               281
                                                                                                                                                                                                                                                    261
                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                   221
                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                         201
                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                     161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
  SerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerPhe
                                  CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGGTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                           ProSerValProSerValGlnProSerLeuGluAspSerProLeuValGlnAlaLeu 380
                                                                                 CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal
                                                                                                               GAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                          GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro
                                                                                                                                                     CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn
                                                                                                                                                                                           ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                     IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                            LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                       LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                      GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                         ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                | IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                             ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                  CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                  CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1020
                                                                                                                                  340
                                                                        1080
                                                                                           360
                                                                                                                                                     960
                                                                                                                                                                       320
                                                                                                                                                                                          900
                                                                                                                                                                                                              300
                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                    280
                                                                                                                                                                                                                                                                        780
                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                           260
                                                                                                                                                                                                                                                                                                                                                                        220
                                                                                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           160
                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                                              200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
ITITLE OF INVENTION: 38692 AND 21117, NOVEL DU
ITITLE OF INVENTION: PHOSPHATASE MOLECULES AN
ITITLE OF INVENTION: PHOSPHATASE MOLECULES AN
ITILE OF INVENTION: UNMERS: US/09/816,494
CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILLING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR PHILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                 RESULT 2
US-09-816-494-1
                                                                                                                                                                         δ
                                                                                                                                                                                               밁
                                                                                                                                                                                                                중 유
                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                               5
                                                                                                                                                              밁
                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                 뮹
                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                              멼
                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                   뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                           Sequence 1, Application Patent No. 6664089
                                                                                                                                                              1981
                                                                                                                                                                                                    1921
                                                                                                                                                                                                                                          1861
                                                                                                                                                                                                                                                                                                                      1741
                                                                                                                                                                                                                                                                                                                                                                                                    1621
                                                                                                                                                                                                                                                                                1801
                                                                                                                                                                                                                                                                                                                                                              1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1261
                                                                                                                                                                                                                                                                                                                                                                                                                                         1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1141
                                                                                                                                                                                661
                                                                                                                                                                                                                      641
                                                                                                                                                                                                                                                             621
                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                          581
                                                                                                                                                                                                                                                                                                                                                                                561
                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                            521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    401
                                                                                                                      US/09816494
```

```
LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla
ATCATTGAGGTCTCC
                                                                                                       ArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetGlu
                                                                                                                                                                                                                                                                               GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu
                                                                                                                                                                                                                                                                                                                                                                      AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                              ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IleIleGluValSer
                                                                                                                                                                                                                                                           CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                              GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLlysGlyTrpHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTTCCACCAGCCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTCCACTGCATCGAAGTGGGAGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe
1995
                                        665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 560
                                                                                                                           660
                                                                                     1980
                                                                                                                                                                        1920
                                                                                                                                                                                                                640
                                                                                                                                                                                                                                                           1860
                                                                                                                                                                                                                                                                                                                                              1800
                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                                                1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
```

AND USES THEREFOR

	Оу 26	Qy 241 Db 1309	Qy 22 Db 124	Qy 201 Db 1189	112	Qy 16	Qy 141 рь 1009	Qy 121 Db 949	Qy 101 Db 889	Qy 81 Db 829	Qy 61 Db 769	Qy 41 Db 709	Qy 21 Db 649	Qy 58	US-10-029-34	re: cent Si t Local ry Matc	US-09-816-49 Alignment Sc	LENGTH: TYPE: DN ORGANISN PRATURE: PRATURE:
DE 1159 AGGGOTTOGLOTTOTTOMATCHACTTOTTOMATCHACTTOTTOMATCHACAGOTTOCLOTTOTTOMATCHACOTTOCLOTTOTTOMATCHACOTTOCLOTTOTTOMATCHACOTTOCLOTTOTTOMATCHACOTTOCLOTTOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOC	프롤	LeuValHiBCy CTAGTGCACTG	ProTrpLeuAspLy ccgrggrrggacaa	IleProGluSerHi ATCCCCGAGTCTCA	GlnGlnAsn CAGCAGAAT				ര—>	ೆ=5	AspLys GACAAA	Hisile			109 (1-665)	Ÿ	589)(omo sapien
DE 1159 AGGGOTTOGLOTTOTTOMATCHACTTOTTOMATCHACTTOTTOMATCHACAGOTTOCLOTTOTTOMATCHACOTTOCLOTTOTTOMATCHACOTTOCLOTTOTTOMATCHACOTTOCLOTTOTTOMATCHACOTTOCLOTTOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOC	tSerLeuAspGluAla 	uAlaGlyIleSerArg aGCTGGGATCTCCCGC	8SerValAspPheI arcagtagarttca:	BPheLeuArgValPro	eGlyTyrValLeuAsn rGGTTATGTGTTAAAT	nLeuTyrLeuGlyCys TCTTTATCTTGGCTGC	rCysIleSerGlnPro	eAlaGluPheSerArg TGCTGAGTTCTCTCGT	rValLeuLeuGlyLys TGTACTTCTGGGTAAA	lValValTyrAspGln TGTAGTTTACGATCAA	eThrGluLeuIleGln TACAGAGCTCATCCAG	alleAsnIleAsnCys CATTAATATCAACTGC	8ValLeuLeuIleAsp AGTGCTGCTAATTGAT	tileGlyThrGlnIle garTGGAACTCAAATT	US-09-816			
DE 1159 AGGGOTTOGLOTTOTTOMATCHACTTOTTOMATCHACTTOTTOMATCHACAGOTTOCLOTTOTTOMATCHACOTTOCLOTTOTTOMATCHACOTTOCLOTTOTTOMATCHACOTTOCLOTTOTTOMATCHACOTTOCLOTTOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOMATCHACOTTOCLOTTOC	TyrargPheValLysG	SerAlaThrIleAlaI CCGCCACCATCGCTA	uLysAlaLysAla8 3AAAGCAAAAGCC7	spSer ACAGC	$O-\mu$	GlnArgAspValLeuA CAGCGAGATGTCCTCA	CysLeuProValAlaA GCTTACCTGTTGCCA	CysPheProGlyLeuc GTTTCCCTGGCCTCT	LeuGluLysSerPheA TGGAGAAGAGCTTCA	SerSerGlnAspValA aGCTCCCAAGATGTTG	HisSerAlaLysHisL CATTCAGCGAAACATA	SerLysLeuMetLysA rccaagcttatgaagc	SerArgProPheValG aGCCGGCCATTTGTGG	ValThrGluArgLeuV GTTACTGAGAGGTTGG	5 4	354 ve: 1 0		
Db 1169 AAGGANGGACANGCTTACAGAATTGGTAAAGAAANAAAAACCTTACAGATTGGTAAAGAAANAAAAAACCTACCTACAGATTGGTAAAGAANAAAAAAACCTACCTACAGATTGGTAAAGAANAAAAAAACCTACCTACAGATTGGTAAAGAAAAAAAAAA	—r 2	aTyrlleMet 2 CTACATCATG 1	rAsnGlyCysVal CAATGGATGTGTT	sGluLysIleLeu 2 TGAGAAAATTTTG 1	oLysProAspPhe AAAGCCTGACTTT	BGluLeuIle 1 ::: GGAGCTGATG 1	eGlyProThr TGGGCCAACC	sser 1	9 1		pIleasp CATTGAT	7 6	O	3=5				
1369 AGAGGATGGACATGTCTTYAGATGAAAGATTTGGAAAGAAAAAAGACCTACTACTACAGATTTGGAAAGAAA		6 0	08	8	8 0	N O		о °	œ Ö	8 5	œ <u> </u>	&	& ·	ъ °				
AAGAGGATGGACATGCTTTAGATGAAGCTTACAGATTTOTGAAAGAAAAAAACCTACT	Db 49	?) B &	g da	g Q	р Q	D QY	B 8	B &) B &	g Q	B 5	S B 8	D Q	뫄	\$ B \$	B 8	P 6
	49	89	29	69					461 1969	441 1909	421 1849	1789	38 172	36 166	160	15, 3,	30 148	1365 281 1429
	AGTTTAAACG	GAAGCCAAGTGA	CCTACAGCTGCAG	hrGluSerSerHi CAGAGTCCTCACA	eraspileLeual :GGATATCTTGGC	LeuSerThrSerGl 	SerProLeuHisAr	SerLysArgLeuHi GCAAGCGATTGCA	AsplysGluGluAl	LysLeuCysGlnPh								
	AGTTTANACGCAGAAGCTGCCAAATG	ILLYBE LOSE LAS PARENT GALLANS POSE LAS PARENT GALLANS PARENT FARENT FARENT GALLANS PARENT FARENT	ATYPSerCysSerGInLeuProThrCysIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	hrGluSerSerHisPheTyrSerAlaSer.	erAspIleLeuAlaProGlnThrSerThr GGATATCTTGGCCCCCCAGACCTCTACC	LeuSerThrSerGlnGlnH.BLeuThrLyB 	SerProLeuHisArgSerGlySerValGlu 	SerLysargLeuHisSerValargThrSer 	ASPLYSGIUGIUATASETIEFTOLYSLYS 	LysLeuCysGlnPheSerProValGlnGlu								
	HITTER BALLYALYSEL (* 1881 MED GALLER BOLL) GALLER BALLER	III		hrcluserserHiebheTyrserAlaserAlaileTyrclyGlyS. 	erAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSt 	LeuSerThrSerGlnGlnHisLeuThrIy9SerAlaGlyLeuGlyL 	SerProLeuHiaArgSerGlySerValGluAspAanTyrHisThrs. 	SerLy8ArgLeuHisSerValArgThrSerSerSerGlyThrAlaG: 	ASPLYSGIUGINALASETILEPTOLYSLYSLEUGINTNIALAATGP: 	Ly6LeuCy6GlnPheSerProValGlnGluLeuSerGluGlnThr?,								

PRESENTANCE 1.38e-126 Length: 2377 SCORE: Similarity: 58.48 CONSERVATIVE: 94 Best Local Similarity: 45.95% Mismatches: 165 Query Match: 38.79% Indels: 104 Best Local Similarity: 45.95% Mismatches: 165 Query Match: 38.79% Indels: 104 Best Local Similarity: 45.95% Mismatches: 165 Query Match: 38.79% Indels: 104 Best Local Similarity: 45.95% Mismatches: 165 Query Match: 38.79% Indels: 104 Decry Match: 38.79% Indels: 104 Query Match: 105 Que	Qy 641 ArgSerArgGluGluLeuGlyLysValGlySerGlnSerPheSerGlySerMetGlu 660
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	B & B & B & B & B & B & B & B & B & B &
GluGlyGlyGlnLysSe	

		<pre>1 MetAlaHisGluMetIleGlyThrGlnIleVal-</pre>	-949	38.74% Indels:	Score: 1324.00 Marches: 314 Percent Similarity: 58.39% Conservative: 93 Best Local Similarity: 45.05% Mismatches: 186	ent Scores: No.: 2.18e-126 Length:	US-09-949-016-3250	; TYPE: DNA ; ORGANISM: Human	; SEQ ID NO 3250 ; LENGTH: 2351	o z	PRIOR APPLICATION NUMBER PRIOR FILING DATE: 200	PRIOR FILING DATE: 2000-10-03	PRIOR FILING DATE: 2000-10-20	CURRENT FILING DATE: 2000-0	CURRENT APPLICATION NUMBER: US/09/949.016		GENERAI APPLIC	; Sequence 3250, Application US/09949016 ; Patent No. 6812339	RESULT 4 US-09-949-016-3250	Db 1959 CTGGGCAAGCAGGCGAGGTTCTCGGGGCAGGTGAAGGTCATCGAGGTGTCC 2009	Qy 649 ValGlySerGlnSerSerPheSerGlySerMetGluIleIleGluValSer 665	Db 1902 ATGGAGTTCGAGGAGGGCATGGTGGAGGGGGGGGGGG	Qy 630 MetGluPheGlyGluSerIleMetSerGluAsnArgSerArgGluGluLeuGlyLys 648	Db 1842 CGGACCGGCTGGCCCGAGGAGCCCGGGAGACGCAGTTCAAGCGCCGCAGCTGCCAG 1901	Qy 610 ArgArgSerTrpHisGluGluSerProPheGluLysGlnPheLysArgArgSerCysGln 629	Db 1782 CCAGGCGGCAGCGACCTGCGGCGGGGGGGGGAGGCGAGGGCTGAGCCCCGGGACGCG 1841	ArgAlaAspS	Db 1722 GGCGCACAGGGGCGGGCGGGCTGCTTTGCGCCCCTTCGGCCGGGGGGCGCCCCCGGGA 1781	Qy 570 SerAlaIleTyrGlyGlySerAlaSerTyrSerAlaTyrSerCysSerGlnLeuProThr 589	Db 1683 ACGCCGTCGCCCGACGGCCCTGGTGCTTCAGCCCCGAG 1721	Qy 550 ThrProSerLeuThrSerSerTrpTyrPheAlaThrGluSerSerHisPheTyrSerAla 569	Db 1629 CCTGGCCAGCCGGCCCCGGGGCCTTGGGCACCGCCGCTTGACTCCCCAGGC 1682	Qy 539 549	Db 1569 GCGGCCCGGCAGACTCCGCGGCACGGCCTCTCGGCCCTGTCGGCGCCCCGGGCTGCCCCGGC 1628	Qy 521LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGly 538	Db 1536 CCCGCGCACAGCCTCGGCCTGAACTTCGGCGAT 1568
8	рb	S	₽	Q	дb	Q	당 :	S S	당	S.	Вb	Ş	DЬ	Qy	дb	Q	₽	Q	Db	γQ	Db	Q	Дδ	Q	뮵	Q	Db ,	Ş	망	Ą	Вb	Q	σb	δ	DЬ	Q
374 SerProLeuValGlnAlaLeuSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSer 393	1159 GGCCTGAGCGCGGGGGAGCCCCCCGCGCCCCCACGCCCCCGGCGACC 1209	354 ProValHisProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAsp 373	1105 CCACCACCTACCTCAGAGAGCGCTGCCACAGGGAATGCGGCTGCCAGGGAGGG	ProLeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArg	1045 CCTCAGGACGCCGAGCCTCAGTCCTGCCGCCGGGGCCCCGCTGCCACGGCTG 1104	319 ProAsnGluProValProAlaValSerGluGlyGlyGlnLysSerGl	 AAGCTGCTGGCCGCCCTGCAGGGCGACCCGGGCACC		949 CCGTCCATCTCGCCCAACTTCAACTTCCTGGGCCAGCTGCTGGAGTACGAGCGCAGCCTG 1008	279 ProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIle 298	889 ATCATGAAGACCATGGGCATGTCCTCCGACGCCTACAGGTTCGTGAAGGACAGGCGC 948	259 IleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArg 278	829 CAAGTCATCGTCCACTGTCTGGCTGGCATCTCCCGCTCTGCCACCATCGCCATCGCCTAC 888	239 CysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyr 258	769 CTGCTGCCCTGGCTGGACAAGTCCATCGAGTTCATCGATAAAGCCCAAGCTCTCCAGCTGC 828	219 IleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGly 238 ::: :::::	709 GACTTCATCTGCGAGAGCCGCTTCATGCGGGTCCCCATCAACGACAACTACTGTGAAAAA 768	199 AspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLys 218	649 CTGATGACGCAAAATGGAATAAGCTACGTCCTCAACGCCAGCAACTCCTGCCCCAAGCCT 708	179 LeuileGlnGlnAsnGlyIleGlyTyrValleuAsnAlaSerTyrThrCysProLysPro 198	589 CTGACCCGCATCCTGCCTCACCTCTACCTGGGCTCGCAGAAGGACGTCCTAAACAAGGAT 648	159 ProThrArglleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGlu 178	529 CCTGCTGCCTACCCATGAGCCTCTCCCAGCCTGCCTGCCT	140SerThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGly 158	469 ATCCTCACTGGGGGCTTCGCCACCTTCTCCTCCTGCTTCCCCGGCCTCTGCGAGGGCAAG 528	120 LeuLeuAlaGlyGlyPheAlaGluPheSerArgCysBheProGlyLeuCysGluGlyLys 139	409 GCAGACAGCTTCCTCTCCATCCTGCTGAGCAAGCTGGACGGCTGCTTCGACAGCGTGGCC 468	100 SerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHis 119	349 ACGGAGCCACAGGACGTGGTCTATGACCAGAGCACGCGGGACGCCAGCGTGCTGGCC 408	80 AspCysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSer 99	289 CAGGGCAAGGTGACCATTGCGGAGCTCATCCAGCCGGCTGCACGCAGGCAG	60 GlnAspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIle 79	229 TGGCATGTGCTCAGCTCCGTCAACATCTGCTGCTCCAAGCTGGTGAAGCTGCGCGCGC	40 SerHisileLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGln 59	169 CGGGCGGGCCTGGGGCCGCTGGTCATCGACAGCCGCTCCTTCGTGGAGTACAACAGC 228	20 GluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThr 39

```
RESULT 5
US-09-949-016-14992
                                                                                                                                                                  밁
                                                                                                                                                                                      S
                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                   몽
                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
                                                                                         Sequence 14992, Application Patent No. 6812339
                                                                                                                                                                                                                           1876
                                                                                                                                                                  1933
                                                                                                                                                                                                                                                                                   1816
                                                                                                                                                                                                                                                                                                                                             1756
                                                                                                                                                                                                                                                                                                                                                                                                    1696
                                                                                                                                                                                                                                                                                                                                                                                                                                                               1657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1270
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     502
                                                                                                                                                                                              649
                                                                                                                                                                                                                                                                                                                610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   414
                                                                                                                                                   TGGGCAAGCGAGCTTCTCGGGCAGCGTGGAGGTCATCGAGGTGTCC 1983
                                                                                                                                                                                                                                                                                                                                                                                                 ValGlySerGlnSerSerPheSerGlySerMetGluIleIleGluValSer
                                                                                                                                                                                                                                      MetGluPheGlyGluSerIleMetSerGluAsnArgSerArg---GluGluLeuGlyLys
                                                                                                                                                                                                                                                                                                  ArgArgSerTrpHisGluGluSerProPheGluLysGlnPheLysArgSerCysGln 629
                                                                                                                                                                                                                                                                                                                                          CCAGGCGGCGGCACCTGCGGCGGCGGGAGGCAGCGAGGGCTGAGCCCCGGGACGCG 1815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACAGCCCGTCGGGGCCGCGCGCTGGGCCTGTCCTCGCCCATCCCGGAC---AGCCCGGAC
                                                                                                                                                                                                                       ATGGAGTTCGAGGAGGGC---ATGGTGGAGGGGCGCGCGCGCGCGAGGAGCTGGCCGCC
                                                                                                                                                                                                                                                                                 CGGACCGGCTGGCCGAGGAGCCGGCCCGGAGACGCAGTTCAAGCGCCGCAGCTGCCAG
                                                                                                                                                                                                                                                                                                                                                                    CysGlyAspGlnValTyrSerValArgArgArgGlnLysProSerAspArgAlaAspSer
                                                                                                                                                                                                                                                                                                                                                                                                                             SerAlaIleTyrGlyGlySerAlaSerTyrSerAlaTyrSerCysSerGlnLeuProThr 589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCGCGCCTGATGCGCGCCCACGGCCCCGCCGGCGCCCCGGCCCC-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AlaAlaSerLeuHisGlyPheSerSerSerGluAspAlaLeuGluTyrTyrLysProSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AACCGCCTCAAGCGCTCCTTCTCCCTGGACATCAAGTCTGCC--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AsnLysLeuLysArgSerPheSerLeuAspIleLysSerValSerTyrSerAlaSerMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACGCCGTCGCCCGACGGGCCCTGGTGCTTCAGCCCCGAG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThrProSerLeuThrSerSerTrpTyrPheAlaThrGluSerSerHisPheTyrSerAla 569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTGGCCAGCCGGCCCCGGGGCCTGGGCACCGCCGCTCGACTCCCCA-----GGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCGGCCCGGCAGACTCCGCGCACGGCCTCTCGGCCCTGTCGGCCCCGGGCTGCCCGGC 1602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeuSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ---SerPro-----ValGlnGluLeuSerGluGlnThrProGluThrSerProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGCGGCCCGACGGCCCCGGGCCCCCGACCCCGGAGGCCCCGAAGCTCTGCAAGCTG 138;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ThrThrLeuAspGlyThrAsn---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ----LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -----TrpHisSerAspIleLeuAlaProGlnThrSer
                                                                                                        US/09949016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ---cccecceecrcccccccccccc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----CTGAACTTCGGCGAT 1542
                             ASSOCIATED OF DETECTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ---LysLeuCysGlnPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ----TACGCCCCTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ---------
                                                                                                                                                                                           665
                                                                                                                                                                                                                                                                                1875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         445
                                                                                                                                                                                                                                                    648
                                                                                                                                                                                                                                                                                                                                                                      609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version 4.
SEQ ID NO 14992
ENDOTH: 13782
                밁
                                      S
                                                                      밁
                                                                                             Ş
                                                                                                                               밁
                                                                                                                                                      S
                                                                                                                                                                                        В
                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-029-345A-109 (1-665) x US-09-949-016-14992 (1-13782)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-949-016-14992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Human
                9538 GGGACAAATTCCAAGGCTCCCAGGATTCTAAAGGCCCTCCTGACGGCAGGGCAGGAAAAG 959
                                                                                                                                  9418
                                                                                                                                                                                                                                                                                                                                                                      9178
                                                                                                                                                                                                                                                                                                                                                                                                                               9118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8879
                                                                                                                                                            178
                                                                                                                                                                                                                                                                                                                                          178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         142 LeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThrArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGGGTGCCAGGGTGGACCAGAGAGACCTCCTCGGGCCCTCCCCTGGATACACTGGGATCT 9537
                                                                                                                                 GTGGAGTTCGGGGGTGGTCAATGGGAAAGGGGGCAGGAGCTCCAGAAGCAGCTTGGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GGGGGCTTCGCCACCTTCTCCTCCTGCTTCCCCGGCCTCTGCGAGGGCAAGCCTGCTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLys---SerThr 141
                                                                                                                                                                                          GACGAGGGAAAAAGGGTAAAAGCCACCCACCCAGGCAATCATAAAATTCCTAGGAGCCCACC 9417
                                                                                                                                                                                                                                                                                                             GCAGGGCTTGCGGGAGGGCCCGGCAGGGCTCGGGGGAGCGGGGAGCTGGCATGCCAA 9297
                                                                                                                                                                                                                                                                                                                                                                                                                             GGAGCGGGGGATGAGGGAGGAAAGGAGCTGAAGGCAGTGGATGAGCTGGGTGTGGGAGAA 9177
                                                                                                                                                                                                                                                  GCTGCGGATGTCACTGGGCCTCTGGCCAGCTCTGAAAGAATCCCCATGTTTTAAAAATGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.36e-70
799.50
34.53%
27.67%
23.39%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13782
254
63
154
449
23
                                                                                                     178
                                                                                                                                                            178
                                                                                                                                                                                                                       178
                                                                                                                                                                                                                                                                                178
                                                                                                                                                                                                                                                                                                                                                                                                                                                          178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      9117
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8998
```

8 8 8

유

318 LyBroadsh	ArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLys 29	CTGAGACCAGCCTGGCGCACATGAGCTCGTGGGTGCCCCAGCGGGTGCGTCAGGTGGGCAG 1031		LysalaLysalaSerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArg 250	231	216 CYBGLULYBILeLeuProTrpLeuAspLyBSerValAspPheIleGlu	179LeuileGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCys 195 :::	178 178 9598 CCTCCACCTTCACTCCCGACCCCGAGCTTCCCACCCCTTCCAACCCGCCCC 9657
Db 11361 GCCCTGGGCAAGCAGGCGAGCTTCTCGGGCAGCGTGAGGTCATCGAGGTGTCC 11414 RESULT 6 US-09-016-434-1135 ; Sequence 1135, Application US/09016434 ; Patent No. 6500938 ; GENERAL INFORMATION: ; APPLICANT: Janice Au-Young APPLICANT: Jeffrey J. Seilhamer ; APPLICANT: Jeffrey J. Seilhamer ; TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING ; TITLE OF INVENTION: PATHWAY GENE EXPRESSION ; NUMBER OF SEQUENCES: 1490	Oy 609 SerArgArgSerTrpHisGluGluSerProPhecluLysGlnPheLysArgArgSerCys 628	569 AlaSerAlaIleTyrGlyGlySerAlaSerTyrSerAlaTyrSerCysSerGlnLeuPro	Qy 538 GlyTrpHisSerAspIleLeuAlaProGlnThr 548	Qy 501 SerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly 520	10869 GACGCCGCCCTGATGCGCCCCACCGCCCCCCGCCCCCCCC	Qy 433 SerThrThrLeuAspGlyThrAsn	Oy 393 SerAshLysLeuLysArgSerIbeuAsplieLysSerValserTyrSerAlaser 412 Comparison	10638 ACCAGCGCACTGCAGCAGGGCCTGCAGCGCTGCAGGACCGCCTGCAGGACGACGACGACGACGACGACGACGACGACGACGAC

843

158

```
Ś
                                        뮍
                                                                       Ś
                                                                                                                  밁
                                                                                                                                                   Ś
                                                                                                                                                                                          밁
                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-029-345A-109 (1-665) x US-09-016-434-1135 (1-2109)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; CLONE: g1418933
US-09-016-434-1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME: Zeller, Karen J.

REGESTRATION NUMBER: 37,071

REFERENCE, DOCKET NUMBER: PA-0

TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 855-0555

TELEPAX: (650) 845-4166

INFORMATION FOR SEQ ID NO: 1135:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS: E
TOPOLOGY: lines
IMMEDIATE SOURCE:
LIBRARY: GENBAN
CLONE: g1418933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: HEREW.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STREET: 3174 PORTER DRIVE CITY: PALO ALTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 2109 base pairs
     136
                                                                                                                                                                                          610
                                                                                                                                                                                                                                                                                                                                            490
                                          730
                                                                             116
                                                                                                                                                                                                                                                                  550
                                                                                                                                                                                                                                                                                                                                                                                                                   430
                                                                                                                                                                                                                               78
                                                                                                                                                                                                                                                                                                       59
                                                                                                                                                                                                                                                                                                                                                                               39
                                                                                                                                                                                                                                                                                                                                                                                                                                                        19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94304
                                                                                                                                                                                                                                                                                                                                                                         ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu
   CysGluGlyLysSerThrLeuValProThrCys---IleSerGlnProCysLeuProVal 154
                                        TGCCGGGCGTTCTACCTGGAAGGTGGCTTCAGTAAGTTCCAAGCCGAGTTCTCCCTGCAT
                                                                       AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeu
                                                                                                              GAGAATACGGGCGAGTCGTTGCTCGGGCTGCTCAAGAAGCTCAAGGACGACGAGGGC
                                                                                                                                               AlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe
                                                                                                                                                                                        ACCCGGCGCTGTGGCACCGACACAGTGGTGCTCTACGACGAGCAGCAGCAGCGACTGGAAC
                                                                                                                                                                                                         AspIleAspCys---SerGlnLysValValValTyrAspGlnSerSerGlnAsp---Val
                                                                                                                                                                                                                                                                  CAGAAGGGTAACCTGCCGGTGCGCGCGCTCTTCACGCGCGGCGAGGACCGGGACCGCTTC
                                                                                                                                                                                                                                                                                                 GlnGlnAspLysValLeuIleThrGluLeuIleGlnHisSerAla---LysHisLysVal
                                                                                                                                                                                                                                                                                                                                        TCGTCGCACATCGAGTCGGCCATCAACGTGGCCATCCCGGGCATCATGCTGCGGCGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                  ĆTĠĠĀĠĊTĠĠĊAĀĊĠĀĠĊĠĠĊTĠĊŤĠĊŤĠAŢĠĠĀĊŢĠĊĊĠĊĊĠĊĀĠGĀĠĊŢĀŤĀĊĠĀĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENBANK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480.00
51.62%
32.70%
14.04%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5.67e-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/09/016,434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PA-0002 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2109
121
70
126
53
                                                                                                                                                   115
                                                                           135
                                                                                                                                                                                        669
                                                                                                                                                                                                                             95
                                                                                                                                                                                                                                                                  609
                                                                                                                                                                                                                                                                                                     77
                                                                                                                                                                                                                                                                                                                                        549
                                                                                                                                                                                                                                                                                                                                                                             58
                                                                                                                                                                                                                                                                                                                                                                                                                  489
                                                                                                                                                                                                                                                                                                                                                                                                                                                     38
                                                                                                                                                                                                                                                                                                                                                                             US-09-023-655-946
                                                                                                                                                                                                                                                                                                                                                                                                RESULT 7
                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                    Sequence 946, Application US/09023655 Patent No. 6607879
                                                                                                                                             APPLICANT: Cocks, Benjamin G.
APPLICANT: Susan G. Stuart
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE DET
TITLE OF INVENTION: EXPRESSION
NUMBER OF SEQUENCES: 1508
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
COUNTRY: USA
ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                            CITY: PALO ALTO STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1264
                                                                                                                                                                                                                                                                                                                                                                                                                                   1492 ACGTGAAAGACCCCACACCCCCTCCTTGC 1519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1432 CAGCTGTATTTTACCACCCCTTCCAACCAGAATGTATACCAGGTGGACTCTCTGCAATCT 149:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1324 ATGAAAAATCCAACATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAG 1383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1024 TTGGACGTGTTGGAGGAATTCGGCATCAAGTACATCTTGAACGTCACCCCCAATTTGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1084 AATCTCTTTGAGAACGCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313 LeuLeuHisLeuGluLysProAsnGluProValProAlaValSerGluGlyGlyGlnLys 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      158 -----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ser-GluThrProLeuSerProProCys 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGACGCTG------GGACTCAGCAGCCCATGTGACAACAGGGTTCCAGCACAG 1431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GluLysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGlu 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGGCTTACCTTATGCAGAGAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAA 1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGAACTGTGGTGTTTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACT 1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCTTCCCAGTGGAGATCTTGCCCCTTCCTCTACTTGGGCTGTGCCAAAGACTCCACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysLysIleLysAsnGlnThrGlyAlaSerGlyPro------LysSerLysLeuLys 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IleAlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLys 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAla 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAla 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LysGluLeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----ProThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGGGGCTCGGGGGCCTGCGGATCAGCTCTGACTCTTCCTCGGACATCGAGTCTGACCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LysPro---AspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPhe
                                                                                                                                                                                                                                            FOR THE DETECTION OF BLOOD CELL GENE
```

1203

```
밁
                            S
                                                                    밁
                                                                                                  S
                                                                                                                                    밁
                                                                                                                                                              8
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                      ક
                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; IMMEDIATE SOURCE:

; LIBRARY: GENBANK

; CLONE: g1418933

US-09-023-655-946
     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-029-345A-109 (1-665) x US-09-023-655-946 (1-2109)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 855-0555
TELEPAX: (650) 845-4166
INFORMATION FOR SEQ. ID NO: 946:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 2109 base pair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         No::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: FILING DATE: HEREW!
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER:
     904
                                                                      844
                                                                                                                                                                                                                                                                          670
                                                                                                                                                                                                                                                                                                                                           019
                                                                                                                                                                                                                                                                                                                                                                                                              550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 490
                                      158
                                                                                                        155
                                                                                                                                       790
                                                                                                                                                                       136
                                                                                                                                                                                                         730
                                                                                                                                                                                                                                        116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   430
                                                                                                                                                                                                                                                                                                                                                                                                                                              59
                                                                                                                                                                                                                                                                                                          96
                                                                                                                                                                                                                                                                                                                                                                             78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19
                                                                                                                                                                                                     TGCCGGGCGTTCTACCTGGAAGGTGGCTTCAGTAAGTTCCAAGCCGAGTTCTCCCTGCAT 789
   AlaAsnIleGly------
                                                                                                                                                                    CysGluGlyLysSerThrLeuValProThrCys---IleSerGlnProCysLeuProVal
                                                                                                                                                                                                                                 AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeu 135
                                                                                                                                                                                                                                                                        GAGAATACGGGCGGCGAGTCGTTGCTCGGGCTGCTCAAGAAGCTCAAGGACGACGAGGGC
                                                                                                                                                                                                                                                                                             AlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe
                                                                                                                                                                                                                                                                                                                                           ACCCGGCGCTGTGGCACCGACACAGTGGTGCTCTACGACGAGGAGCAGCAGCGACTGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                              CAGAAGGGTAACCTGCCGGTGCGCGCGCGCTCTTCACGCGCGGCGAGGACCGGGACCGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                              GlnGlnAspLysValLeuIleThrGluLeuIleGlnHisSerAla---LysHisLysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCGTCGCACATCGAGTCGGCCATCAACGTGGCCATCCCGGGCATCATGCTGCGGCGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                                   CTGGGGCTCGGGGGCCTGCGGATCAGCTCTGACTCTTCCTCGGACATCGAGTCTGACCTT
                                                                                                                                                                                                                                                                                                                                                                           AspīleAspCys---SerGlnLysValValValTyrAspGlnSerSerGlnAsp---Val 95
                                                                                                                                      TGCGAG-----ACCAATCTAGACGGCTCGTGTAGCAGCAGCTCGCCGCCGTTGCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5.67e-39
480.00
51.62%
32.70%
14.04%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US/09/023,655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PA-0001 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2109
121
70
126
53
                                                                                                                                      843
                                                                                                                                                                     154
                                                                                                                                                                                                                                                                        729
                                                                                                                                                                                                                                                                                                                                           669
                                                                                                                                                                                                                                                                                                                                                                                                                                                77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                549
   963
                                     158
                                                                    903
                                                                                                      158
                                                                                                                                                                                                                                                                                                                                                                                                              609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   489
                                                                                                                                                                                                                                                 APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASS
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR FILING DATE: 2000-10-30
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-10-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 8
US-09-949-016-2615
; Sequence 2615, Application US/09949016
; Patent No. 6812339
                 Query Match:
                                                                    Score:
                                                                                                                                      ; ORGANISM: Human
US-09-949-016-2615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                     Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                   Percent Similarity:
                                                                                                    Alignment Scores:
                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FASTSEQ for Window
SEQ ID NO 2615
LENGTH: 2475
                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION: APPLICANT: VENTER, J.
                                                                                                                                                         ORGANISM:
                                                                                                                                                                       TYPE:
                                                                                      No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1492 ACGTGAAAGACCCCACACCCCTCCTTGC 1519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1324 ATGAAAAATCCAACATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1264
                                                                                                                                                                     DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1024 TTGGACGTGTTGGAGGAATTCGGCATCAAGTACATCTTGAACGTCACCCCCAATTTGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluLysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGCTGTATTTTACCACCCCTTCCAACCAGAATGTATACCAGGTGGACTCTCTGCAATCT 1491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGAACTGTGGTGTTTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ser-GluThrProLeuSerProProCys 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LeufeuHisLeuGluLysProAsnGluProValProAlaValSerGluGlyGlyGlnLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGACGCTG-----GGACTCAGCAGCCCATGTGACAACAGGGTTCCAGCACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysLysIleLysAsnGlnThrGlyAlaSerGlyPro-----LysSerLysLeuLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCTCTTTGAGAACGCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LysGluLeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LysPro---AspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCTTCCCAGTGGAGATCTTGCCCTTCCTCTACTTGGGCTGTGCCAAAGACTCCACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----ProThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsn
9.68e-39
479.00
51.62%
32.70%
14.01%
               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                       4.0
                                                                                                                                                                                                                                                                                                                                                                                                             ASSOCIATED
OF DETECTION AND USES THEREOF
 2475
121
70
126
126
53
```

332 1431 1383

295

1323 275

312

1263 255

```
1521
                                                                                                                                                                                                                                                                                          1353
                                                                                                                                                                                                                                                                                                                                                                                      1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1053
                                                                                                                                                                                                                                                                                                                                                                                                                                  236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  579 TCGTCGCACATCGAGTCGGCCATCAACGTGGCCATCCCGGGCATCATGCTGCGGCGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                59 GlnGlnAspLysValLeuIleThrGluLeuIleGlnHisSerAla---LysHisLysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         39 ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19
                                                                                                                                                                                                                  GluLysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGlu
                                                                                                                                                                                                                                                                                     GTGGCTTACCTTATGCAGAAGCTCAATCTGTCGATGACGATGCCTATGACATTGTCAAA
                                                                                                                                                                                                                                                                                                                          IleAlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATCTCTTTGAGAACGCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysGluLeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysPro 196
CAGCTGTATTTTACCACCCCTTCCAACCAGAATGTATACCAGGTGGACTCTCTGCAATCT 1580
                                               LeuLeuHisLeuGluLysProAsnGluProValProAlaValSerGluGlyGlyGlnLys
                                                                                                                                          LysLysIleLysAsnGlnThrGlyAlaSerGlyPro-----LysSerLysLeuLys
                                                                                                                                                                                            ATGAAAAATCCAACATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAG
                                                                                                                                                                                                                                                                                                                                                                                 AAGAACTGTGGTGTCTTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACT 1352
                                                                                                                                                                                                                                                                                                                                                                                                                 SerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAla 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysPro---AspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPhe 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCTTCCCAGTGGAGATCTTGCCCTTCCTCTACTTGGGCTGTGCCAAAGACTCCACCAAC 1112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGGGCTCGGGGGCCTGCGGATCAGCTCTGACTCTTCCTCGGACATCGAGTCTGACCTT 992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AlaAsnIleGly-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGGACGTGTTGGAGGAATTCGGCATCAAGTACATCTTGAACGTCACCCCCAATTTGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CYsGluGlyLysSerThrLeuValProThrCys---IleSerGlnProCysLeuProVal 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeu 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAGAATACGGGCGGCGAGTCGGTCCGGGCTGCTCAAGAAGCTCAAGGACGACGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -----ProThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsn 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCGAG-----ACCAATCTAGACGGCTCGTGTAGCAGCAGCTCGCCGCTTGCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCCGGGCGTTCTACCTGGAAGGTGGCTTCAGTAAGTTCCAAGCCGAGTTCTCCCTGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AspIleAspCys---SerGlnLysValValValTyrAspGlnSerSerGlnAsp---Val
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCCGGCGCTGTGGCACCGACACAGTGGTGCTCTACGACGAGCAGCAGCAGCGACTGGAAC
                                                                                              ------GGACTCAGCAGCCCATGTGACAACAGGGTTCCAGCACAG
                                                                                              1520
                                                                                                                                          312
                                                                                                                                                                                         1472
                                                                                                                                                                                                                                                                                        1412
                                                                                                                                                                                                                                                                                                                                  275
                                                                                                                                                                                                                                                                                                                                                                                                                                255
                                                                                                                                                                                                                                        295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                578
```

Ś

밁

Ś

음 성 음

유 성

S

Ś

유정

밁

Ś

유정

밁

8

US-10-029-345A-109 (1-665) x US-09-949-016-2615 (1-2475)

밁

유 성

음 성 음 성 음 성

8 8

음 성 음 성

```
; FEATURE:
; NAME/KEY: UNSURE
; LOCATION: 37
; OTHER INFORMATION: X
US-09-513-999C-2877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILE REFERENCE: 59.US2.REG

CURRENT APPLICATION NUMBER: US/09/513,999C

CURRENT FILING DATE: 2000-02-24

PRIOR APPLICATION NUMBER: US 60/122,487

PRIOR FILING DATE: 1999-02-26

NUMBER OF SEQ ID NOS: 36681

SOFTWARE: Patent.pm

SEQ ID NO 2877

LENGTH: 333

TYPE: DNA

ORGANISM: Homo sapiens
밁
                         δ
                                                        US-10-029-345A-109 (1-665) x US-09-513-999C-2877
                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 9
US-09-513-999C-2877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Expressed Sequence Tags and Patent No. 6783961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2877, Application Patent No. 6783961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Dumas Milne Edwards, J.B. APPLICANT: Duclert, A. APPLICANT: Giordano, J.Y.
                                                                                                                                                              No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: misc_feature LOCATION: 18
OTHER INFORMATION: y=c
                                                                                                                                                                                                                                                                                                                                          LOCATION: 58
OTHER INFORMATION: r=a
                                                                                                                                                                                                                                                                                                                                                                                                     LOCATION: 36
OTHER INFORMATION: n=a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 17
OTHER INFORMATION: h=a
FEATURE:
                                                                                                                                                                                                                                                                                     OTHER INFORMATION:
                                                                                                                                                                                                                                                                                               NAME/KEY: misc_feature
LOCATION: 237
                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                               OTHER INFORMATION: k=g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc_feature LOCATION: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: CDS
LOCATION: 127..333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1581 ACGTGAAAGACCCCACACCCCTTCCTTGC 1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         333
                            12
۳
              ThrGluArgLeuValAlaLeuLeuGluSerGlyThr-GluLysValLeuLeuIleAspSe
ACTGAGAGGTTGGTGGHYK--CTGGAAAGTGGAACGGNAAAAAGTGCTGCTAATTGATAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ser-GluThrProLeuSerProProCys
                                                                                                                                                                                                                                                                                     w=a
                                                                                               6.22e-40
475.00
93.81%
93.81%
13.90%
                                                                                                                                                                                                                         Xaa=His
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ç
                                                                                                                                                                                                                                                                                     ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US/09513999C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      o
                                                                                                                                                                                                                         ő
                                                                                                                                                                                                                                                                                                                                                                                                       a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      or
                                                                                                                                                                                                                                                                                                                                                                                                        9
                                                                                                                                                                                                                         Gln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ct
                                                                                                                                                                                                                                                                                                                                                                                                        rt
                                                                                                                Length:
Matches:
Conservative:
Mismatches:
                                                                                    Indels:
Gaps:
                                                        (1-333)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Encoded Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Proteins
58
```

당 ક 밁 र् 밁 Ś 밁 8 밁 ঠ

1076

1019

```
GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wel, Bo
TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY
FILE REFERENCE: 200125.416
CURRENT APPLICATION NUMBER: US/09/557,921
CURRENT FILING DATE: 2000-04-20
NUMBER OF SEQ ID NOS: 20
NUMBER OF SEQ ID NOS: 20
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1
LENGTH: 1830
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 10
US-09-557-921-1
                                                                                                                                                                                                                                                                                                                                                                                                             US-10-029-345A-109 (1-665) x US-09-557-921-1 (1-1830)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-557-921-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application Patent No. 6551810
                                                                                                                                                                                                                                                                                                                                            603
 903
                                   125
                                                                   843
                                                                                                     105
                                                                                                                                       783
                                                                                                                                                                                                      723
                                                                                                                                                                                                                                                                          663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           119
                                                                                                                                                                     85
                                                                                                                                                                                                                                          66
                                                                                                                                                                                                                                                                                                          47
                                                                                                                                                                                                                                                                                                                                                                             27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3
                                                                                                                                                                                                                                                                                                                                            GTCATCATTGACTGCAGGCCCTTCATGGAGTACAACAAGAGTCACATCCAAGGAGCTGTC
ValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSerAspCysPheLeu
                                                                                                                                                                                                      CTAGACTTGATTTCCTGTAGGGAAGGCAAGGACTCTTTCAAGAGGATCTTTTCCAAAGAA
                                                                                                                                                                                                                                     ThrGluLeuIleGln---HisSerAlaLysHisLysValAspIleAspCysSerGlnLys
                                                                                                                                                                                                                                                                          CACATTAACTGTGCCGATAAGATCAGCCGGCGGAGACTGCAGCAGGGCAAGATCACTGTC
                                                                                                                                                                                                                                                                                              AsnIleAsnCysSer---LysLeuMetLysArgArgLeuGlnGlnAspLysValLeuIle
                                                                                                                                                                                                                                                                                                                                                                     LeuLeuIleAspSerArgProPheValGluTyrAsnThrSerHisIleLeuGluAlaIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 euGluLysSerPheAsnSerValHisLeuLeuAla 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               erSerGlnAspValAlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        erLysLeuMetLysArgArgLeuGlnGlnAspLysValLeuIleThrGluLeuIleGlnH
                               PheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLys------
                                                                                                 ThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeuLeuAlaGlyGly
                                                                                                                                     ATTATAGTTTATGATGAGAATACCAATGAACCAAGCCGAGTGATGCCCTCCCAGCCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 isSerAlaLysHisLysValAspIleAspCysSerGlnLysValValValTyrAspGlnS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCGGCCATTTGTGGAATACCAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rArgProPheValGluTyr-AsnThrSerHisIleLeuGluAlaIleAsnTleAsnCysS
                                                                                                                                                                                                                                                                                                                                                                                                                                                             6.04e-38
469.00
57.72%
35.91%
13.72%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US/09557921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DUAL-SPECIFICITY
                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative: Mismatches: Indels: Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  333
                                                                                                                                                                                                                                                                                                                                                                                                                                               1830
107
65
96
30
                                                                                                   124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  111
 962
                                 139
                                                                   902
                                                                                                                                     842
                                                                                                                                                                     104
                                                                                                                                                                                                      782
                                                                                                                                                                                                                                        84
                                                                                                                                                                                                                                                                          722
                                                                                                                                                                                                                                                                                                          65
                                                                                                                                                                                                                                                                                                                                            662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ş
                                            Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                              APPLICANT: Retter, Marc
APPLICANT: Retter, Marc
APPLICANT: Mannion, Jane
APPLICANT: Mannion, Jane
APPLICANT: Mannion, Jane
APPLICANT: Mannion, Jane
APPLICANT: Mannion, Jane
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 20121.478C14
CURRENT APPLICATION NUMBER: US/09/702,705
CURRENT FILING DATE: 2000-10-30
NUMBER OF SEQ ID NOS: 1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-702-705-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
US-10-029-345A-109
                                                                                                                                                                     US-09-702-705-803
                                                                                                     Score:
                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                     SOFTWARE: F
SEQ ID NO 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION: APPLICANT: Wang, T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 8
                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                     LENGTH: 1238
TYPE: DNA
                                                                                                                                                                                      ORGANISM:
                                                                                                                     No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1020 ---CCCACCACCCCTGACATCGAGAACGCTGAGCTCACCCCCCATCTTGCCCTTTCCTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  188 ValLeuAsnAlaSer-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0. 650401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    168 LeuGlyCysGlnArgAspValLeuAsnLysGluLeuIleGlnGlnAsnGlyIleGlyTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140
                                                                                                                                                                                                                                                                                                                                                                                      Fanger, Gary
Vedvick, Tom
Carter, Darrick
Retter, Marc
Mannion, Jane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTTGAAGAGGCTTTTGAGTTCATTGAGGAAGCTCACCAGTGTGGGAAGGGGCTTCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysValLeuVal
                                                                                                                                                                                        Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCAAACCTTAACTTCATGGGGCAGTTGCTAGAGTTCGAGGAAGACCTAAACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThrIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACTGCCAGGCTGGGGTGTCCCGCCTCCGCCATCGTCATCGCTTACTTGATGAAGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMetLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnProCysLeuPro---ValAlaAsnIleGlyProThrArgIleLeuProAsnLeuTyr 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTCGGATGACCATGACTGATGCTTATAAATTTTGTCAAAGGCAAACGACCAATTATCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeuProTrp
                                                                                                                                                                                                                                                        FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -----AACTACAAGCGGCTGCCAGCCACTGACAGCAAGCAGCAGCAGCAGCAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTCATCAACGTCACCACTCATCTTCCCCCTCTACCACTATGAGAAAGGCCTGTTC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTGGCAATGAGCAGGATGCTCAGGACCTGGACACCATGCAGCGGCTGAACATCGGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGCCGGGAGGTGGGGGGCGCATCCGCGCCTCGAGCTTGCTACCTCAGCCCATC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Wang, Tongtong
Bangur, Chaitanya
Lodes, Michael A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application
                                                                                                                                                                                     sapien
(1-665)
                              1.34e-36
453.00
50.52%
31.41%
13.25%
x US-09-702-705-803 (1-1238)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/09702705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 တ
                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ----SerThrLeuValProThrCysIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TyrThrCysProLysProAspPheIlePro
                                                                                                                                                                                                                                                                                                                                                            FOR
                                                                                                                                                                                                                                                                                                                                                             THE
                               1238
120
73
143
46
                                                                                                                                                                                                                                                                                                                                                             THERAPY
```

1478

1364

1424

282

1304

242

262

1244

222

1190 202 1136 187

ঠ

밁 र्

밁

밁 ક 밁 S 밁 გ 밁 ई

```
1059
     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     642 GTGGAGATCCTTCCCTCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          160 ThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeu 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97
                                                                                                                                                                                                                                                                                                                                                                           ATCATCTCGCCCAACTTCAGCTTCATGGGGCAGCTGCTGCAGTTCGAGTCCCAGGTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                        ThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           :::
|||||||
crearcacccreaccarcaccaccretterateraterateraterateraccacaccccaaac---cac
ValProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAla
                                                                                        ProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSer
                                                                                                                                                                                                 AsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerPro
                                                                                                                                                                                                                                                                  GCCACGTCCTGTGCTGCGGAGGCTGCTÄĞC------CCC
                                                                                                                                                                                                                                                                                                                     AsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysPro 319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGC 878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAGCCCTTGGACCTGGAGCTCCTGTGGGACCCCACTACACGACCAGGAGGGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlnPro-----CysLeuProValAla-----AsnIleGlyPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGATGAAGAAACGGGTGAGGCTGGAGGAGGCCTTCGAGTTCGTTAAGCAGCGCCGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGCTGGTGCACTGCCAGGCGGCATCTCGCGGTCGGCCATCTGCCTGGCCTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCTGTTCTAAAACCAAGGCCCTGGCAGCCATCCCACCCCGGTTCCCCCCAGCGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ---AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGly 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCTTCGGCGAGGACACGTGTCGCTGGTGGTGCAGGCGTGCGCCGAGGCCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ValAspIleAspCysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGCCGAGGAGGAGGTACGCGCCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGCACCGACATCTGCCTGCTCAAAGGCGGCTATGAGAGGTTTTTCCTCCGAGTACCCAGAA 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlnGlnAspLysValLeuIleThrGluLeuIle-----GlnHisSerAlaLysHisLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCGGGCTACATCCTAGGTTCGGTCAACGTGCGCTGTAACACCATCGTGCGGCGGCGG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGCCGAGCGGC---GGCAAGTGCCTGCTGCTGCACACACCGTTCCTGGCGCACAGC
                                                   ACCTCGCAGTTCGTCTTCAGCTTTCCGGTC---TCCGTGGGC
                                                                                                                                                            -GGGGAGCGGGGCAAGACCCCCGCCACCCC
                                                   1172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   224
```

밁

밁

S

Ś

Ś 밁 Ś 밁 á 밁 Ś 밁 Ś 밁 á 밁 ঠ 밁 S 밁 Ş 뮍 Ś 망 Ś

```
S
                                                         뮍
                                                                                      S
                                                                                                                        밁
                                                                                                                                                δ
                                                                                                                                                                                      밁
                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-029-345A-109 (1-665) x US-09-736-457-803 (1-1238)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Fan, Liqun
APPLICANT: Wang, Aijun
APPLICANT: Wang, Aijun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C15
CURRENT APPLICATION NUMBER: US/09/736,457
CURRENT FILLNG DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 1864
SOFTWARE: PASTSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-736-457-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-736-457-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: FASTS;
SEQ ID NO 803
LENGTH: 1238
TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION: APPLICANT: Wang, T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 803, Application US/09736457 Patent No. 6509448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Мо::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1227 CCCAGC 1232
                                                                                                                                                                                       342
                                                                                                                                                                                                                                                    282 GCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGCCGAGGAGGAGGTACGCGCCCGC
                            380 LeuSer 381
                                                                                                                                                         97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity:
                                                                                                                                                                                                                       77
                                                                                                                                                                                                                                                                                 59 GlnGlnAspLysValLeuIleThrGluLeuIle-----GlnHisSerAlaLysHisLys 76
                                                                                                                                                                                                                                                                                                                                                                                                                19
TTCTGTTCTAAAACCAAGGCCCTGGCAGCCATCCCACCCCCGGTTCCCCCCAGCGCCACA
                                                                                                                                                                                       GCGGGCTACATCCTAGGTTCGGTCAACGTGCGCTGTAACACCATCGTGCGGCGGCGG---
                                                                                                                                                                                                                                                                                                                                                                                                      LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                             CGCACCGACATCTGCCTGCTCAAAGGCGGCTATGAGAGGTTTTCCTCCGAGTACCCAGAA 521
                                                                                      ---AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGly 134
                                                                                                                                                    SerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe---
                                                                                                                                                                                                                     ValAspIleAspCysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAla
                                                                                                                                                                                                                                                                                                                                                ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu 58
                                                                                                                                                                                                                                                                                                                                                                                 CTGCCGAGCGGC----GGCAAGTGCCTGCTGCTGGACTGCAGACCGTTCCTGGCGCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCCTCCGCGAGGACAGCACCGTGTCGCTGGTGGTGCAGGCGCTGCGCCCGCAACGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fanger, Gary
Vedvick, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Retter, Marc
Mannion, Jane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Carter, Darrick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bangur, Chaitanya
Lodes, Michael A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wang, Tongtong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.34e-36
453.00
50.52%
31.41%
13.25%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ß
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  THE THERAPY AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1238
120
73
143
46
                                                                                                                          461
                                                                                                                                                                                       401
                                                                                                                                                                                                                       96
                                                                                                                                                                                                                                                      341
                                                                                                                                                                                                                                                                                                                     281
```

```
/ Sequence 803, Application Us/09614124B
/ Patent No. 6630574
/ GENERAL INFORMATION:
/ APPLICANT: Wang, Tongtong
/ APPLICANT: Wang, Tongtong
/ APPLICANT: Lodes, Michael A.
/ APPLICANT: Lodes, Michael A.
/ APPLICANT: Lodes, Michael A.
/ APPLICANT: Carter, Darrick
/ APPLICANT: Carter, Darrick
/ APPLICANT: Retter, Marc
/ APPLICANT: Retter, Marc
/ APPLICANT: Mannion, Jane
/ TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
/ TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
/ FILE REFERENCE: 210121.478C9
/ CURRENT APPLICATION NUMBER: US/09/614,124B
/ CURRENT FILING DATE: 2001-07-11
/ NUMBER OF SEQ ID NOS: 1668
/ SOFTWARE: FastSEQ for Windows Version 3.0
/ SEQ ID NO 803
                                                                                                                                                                                                                                                                                                                                    RESULT 13
US-09-614-124B-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1059
                                                                                                                                                                                                                                                                                                                                                                                            1227 CCCAGC 1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           149
                                                                                                                                                                                                                                                                                                                                                                                                                             LeuSer 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ValProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAla 379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCACGTCCTGTGCTGCGGAGGCTGCTAGC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MetlysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGCACTCGGCCCCAGCAGCCTGCCCTACCTG----CACAGCCCCATCACCACCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlnPro------CysLeuProValAla------AsnIleGlyPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PheIleProGluSerHiePheLeuArgValProValAsnAspSerPheCysGluLysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGGACGCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAAC---CAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGGAGATCCTTCCTCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThrargIleLeuProasnLeuTyrLeuGlyCysGlnArgaspValLeuAsnLysGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGCCCTTGGACCTGGACTGCAGCTCCTGTGGGACCCCACTACACGACCAGGAGGGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCTCGCAGTTCGTCTTCAGCTTTCCGGTC---TCCGTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            င္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             159
                                                                                       δ
                                                                                                                                                  S
                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                        밁
                                                                                                                             밁
                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-029-345A-109 (1-665) x US-09-614-124B-803 (1-1238)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-614-124B-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 1238
TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             402
                         280
                                                                                                                                                                                                                                                                                                       200
                                                                                                                                                                                                                                                                                                                                                                                                                                             160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              225 GCGGGCTACATCCTAGGTTCGGTCAACGTGCGCTGTAACACCATCGTGCGGCGGCGG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         168 CTGCCGAGCGGC---GGCAAGTGCCTGCTGCTGGACTGCAGACCGTTCCTGGCGCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          39 ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu
::::||||||
::::::||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19 LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 77 ValAspIleAspCysSerGlnLysValValTyrAspGlnSerSerGlnAspValAla
   ThrileSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLys
                                                        MetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro
                                                                                                                                                                                                                                                                                                                                                                   IleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAsp
                                                                                                                                                                                                                                                                                                                                                                                                             GTGGAGATCCTTCCCTTCCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATG
                                                                                                                                                                                                                                                                                                                                                                                                                             ThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeu :::::::::::
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGCCCTTGGACCTGGAGCTCCTGTGGGACCCCACTACACGACCAGGAGGGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnPro------CysLeuProValAla------AsnIleGlyPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTCTGTTCTAAAACCAAGGCCCTGGCAGCCATCCCACCCCGGTTCCCCCCAGCGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ---AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGCCTCCGCGAGGACAGCACCGTGTCGCTGGTGGTGCAGGCGCTGCGCCGAAGGCGCAACGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnGlnAspLysValLeuIleThrGluLeuIle-----GlnHisSerAlaLysHisLys
                                                                                                                             GTGCTGGTGCACTGCCAGGCGGCATCTCGCGGTCGGCCATCTGCCTGGCCTACCTG
                                                                                                                                               ValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIle
                                                                                                                                                                                                                               LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCys
                                                                                                                                                                                                                                                                                                  PheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LeuCysGluGlyLysSerThrLeu------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGCCGAGGAGGAGGTACGCGCCCGC
                                                                                                                                                                                                AGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGC
                                                                                                                                                                                                                                                                   TTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATC
                                                                                                                                                                                                                                                                                                                                        CTGGACGCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAAC---CAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.34e-36
453.00
50.52%
31.41%
13.25%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----ValProThrCysIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 143
46
13
                                                           998
                                                                                                                             938
                                                                                                                                                               259
                                                                                                                                                                                                878
                                                                                                                                                                                                                                  239
                                                                                                                                                                                                                                                                                                       219
                                                                                                                                                                                                                                                                                                                                                                            199
                                                                                                                                                                                                                                                                                                                                                                                                                                               179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             38
                                                                                                                                                                                                                                                                                                                                        758
                                                                                                                                                                                                                                                                                                                                                                                                           701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        281
```

र् 밁 S В ঠ 밁 S В 5 밁 ð 밁 श 닭 ঠ 밁

밁 र् 밁 ð 밁 ঠ 밁 **5** B

Qy 39 ThrSerHisIleLeuGluAlaIleAsnCysSerLysLeuMetLysArgArgLeu 58 ::: 225 GCGGGCTACATCCTAGGTTCGGTCAACGTGGCGTGTAACACCATCGTGCGGCGGCGG 281 Qy 59 GlnGlnAspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLys 76 ::: 282 GCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCGCCGAGGAGGTACGCCCGC 341 Qy 77 ValAspIleAspCysSerGlnLysValValTyrAspGlnSerSerGlnAspValAla 96 :::	19 LeuGluSerGlyThrGluLysValLeuLeuIle	Mismacches: Indels: Gaps:	nment Scores: 1.34e-36 Ength: 453.00 Matches: 50.52% Conservati	ORGANI 09-671-	EQ for	FILE REFERENCE: 210121.478C12 CURRENT APPLICATION NUMBER: US/09/671,3 CURRENT FILING DATE: 2000-09-26 NUMBER OF SEO ID NOS: 1825	APPLICANT: Mannion, Jane APPLICANT: Mannion, Jane APPLICANT: Fan, Liqun TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER	APPLICANT: Fanger, Gary APPLICANT: Vedvick, Tom APPLICANT: Carter, Darrich APPLICANT: Retter Marc	GENERAL INFORMATI APPLICANT: Wang APPLICANT: Bang APPLICANT: Lode	RESULT 14 US-09-671-325-803 ; Sequence 803, Application US/09671325 ; Patent No. 6667154	Qy 380 LeuSer 381 Db 1227 CCCAGC 1232	1173 GTGCACTCGGCCCCAGCAGCCTGCCCTACCTGCACAGCCCCATCACCACCTCT	Db 1134ACCTCGCAGTTCGTCTTCAGCTTTCCGGTCTCCGTGGGC 1172 OV 360 ValProSerValProSerValGlnProSerLeuGluAspSerProLeuValGlnAla 379	340 ProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSer	Qy 320 AsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerPro 339 ::: ::: ::::::::::::::::::::::::	Qy 300 AsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuHisLeuGluLysPro 319 ::: ::: Db 1059 GCCACGTCCTGTGCTGCGGAGGCTGCTAGC	Db 999 ATCATCTCGCCCAACTTCAGCTTCATGGGGCAGCTGCTGCAGTTCGAGTCCCAGGTGCTG 1058
Db 1 RESULT 15 US-09-589- ; Sequence ; Patent N ; GENERAL ; APPLICA ; APPLICA	Qy Db	Db Qy	Qy dd	Db Qy	gg VQ	p Q	ag Vy	dg VQ	g Vy	dd VQ	B &	Db .	g B	Q	dg VQ	ß &	gb
Db 1227 CCCAGC 1232 Db 1227 CCCAGC 1232 US-09-589-184-803 ; Sequence 803, Application US/09589184 ; Patent No. 6686447 ; GENERAL INFORMATION: ; APPLICANT: Mang, Tongtong ; APPLICANT: Bangur, Chaitanya S.	360 ValProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAla 379	340 ProCygAlaAgpSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSer 359	320 ABNGluProValProAlaValSerGluGlyGlyGlnLySSerGluThrProLeuSerPro 339 ::: ::: ::: :::	300 AsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysPro 319 :::	280 ThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLys 299	260 MetLygArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro 279	240 ValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIle 259	220 LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaIysAlaSerAsnGlyCys 239	200 PheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIle 219	180 IleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysbroLysbroAsp 199 	160 ThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeu 179	::: GAGCCCTTGGACCTGGACTCCTGTGGGACCCCACTACACGACCAGGAGGGTCCT		LeuCysGluGlyLysSerThrLeu	116AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGly 134 ::: :: 462 CGCACCGACATCTGCTCAAAGGCGGCTATGAGAGAGTTTTCCTCCGAGTACCCAGAA 521	97 SerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe 115	342 TIGCGCTCCGGCCTCTACTCGGCGGTCATCGTCTACGACGAGCGCAGCCCGCGCGCG

```
Best Local Similarity:
Query Match:
DB:
                                                                                                                                             ક
                                                                                                                                                                                  밁
                                                                                                                                                                                                      S
                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                     ક
                                                                                                                                                                                                                                                                                                                                ક
                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                            र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                      S
                                                           밁
                                                                                                           멍
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Lodes, Michael A.
APPLICANT: Fanger, Gary
APPLICANT: Vedvick, Tom
APPLICANT: Carter, Darrick
APPLICANT: Carter, Darrick
APPLICANT: Retter, Marc
APPLICANT: Mannion, Jane
APPLICANT: Mannion, Jane
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C8
CURRENT APPLICATION NUMBER: US/09/589,184
CURRENT FILING DATE: 2000-06-05
NUMBER OF SEQ ID NOS: 827
SOFTWARE: PASTSEQ for Windows Version 3.0
 밁
                                                                                   ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-029-345A-109 (1-665) x US-09-589-184-803 (1-1238)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-589-184-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQ ID NO 803
LENGTH: 1238
TYPE: DNA
ORGANISM: Homo sapien
 759
                            200
                                                           702
                                                                                         180
                                                                                                                        642
                                                                                                                                                     160
                                                                                                                                                                                   582
                                                                                                                                                                                                                149
                                                                                                                                                                                                                                               522
                                                                                                                                                                                                                                                                           135
                                                                                                                                                                                                                                                                                                          462
                                                                                                                                                                                                                                                                                                                                        116
                                                                                                                                                                                                                                                                                                                                                                       402
                                                                                                                                                                                                                                                                                                                                                                                                                                    342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 77
                                                                                                                                                                                                                                                                                                                                                                                                    97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ---AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGly 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ValAspIleAspCysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCGGGCTACATCCTAGGTTCGGTCAACGTGCGCTGTAACACCATCGTGCGGCGGCGG---
                                                                           IleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAsp
                                                                                                                        GTGGAGATCCTTCCTCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATG
                                                                                                                                         ThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeu
                                                                                                                                                                                  GAGCCCTTGGACCTGGAGCTCCTGTGGGACCCCACTACACGACCAGGAGGGTCCT
                                                                                                                                                                                                                GlnPro-----CysLeuProValAla-----AsnIleGlyPro
                                                                                                                                                                                                                                             TTCTGTTCTAMAACCAAGGCCCTGGCAGCCATCCCACCCCGGTTCCCCCCAGCGCCACA
                                                                                                                                                                                                                                                                           CGCACCGACATCTGCCTGCTCAAAGGCGGCTATGAGAGGTTTTCCTCCGAGTACCCAGAA 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGCCGAGGAGGAGGAGGTACGCGCCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnGlnAspLysValLeuIleThrGluLeuIle-----GlnHisSerAlaLysHisLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu
                                                                                                                                                                                                                                                                                                                                                                       AGCCTCCGCGAGGACAGCACCGTGTCGCTGGTGCTGCGCGCTGCGCCGCAACGCCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                  SerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe---
                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGCGCTCCGGCCTCTACTCGGCGGTCATCGTCTACGACGAGCGCAGCCCGCGCGCCGAG
TTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATC
                            PheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIle 219
                                                           CTGGACGCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAAC---CAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.34e-36
453.00
50.52%
31.41%
13.25%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FOR THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1238
120
73
143
46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AND
                                                                                                                                                                                                                                               581
818
                                                           758
                                                                                                                      701
                                                                                                                                                                                   641
                                                                                                                                                                                                                159
                                                                                                                                                                                                                                                                                                                                                                       461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              341
```

```
δ
                                                                 밁
                                                                                        δ
                                                                                                                                    밁
                                                                                                                                                                   S
                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
1227
                                                                                                360 ValProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAla
                                                                                                                                                                                                                                         320 AsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerPro
                                                                                                                                                                                                                                                                                                              300 AsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysPro
                                380 LeuSer 381
                                                                                                                                                                                                                                                                                                                                                 999 ATCATCTCGCCCAACTTCAGCTTCATGGGGCAGCTGCTGCAGTTCGAGTCCCAGGTGCTG
                                                                                                                                                                                                                                                                                                                                                                   280 ThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240 ValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            819 AGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                      939 ATGATGAAGAAACGGGTGAGGCTGGAGGAGGCCTTCGAGTTCGTTAAGCAGCGCCGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                          260 MetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            879 GTGCTGGTGCACTGCCAGGCGGGCATCTCGCGGTCGGCCACCATCTGCCTGGCCTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           220 LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCys
CCCAGC 1232
                                                                                                                                                                                                           GCCACGTCCTGTGCTGCGGAGGCTGCTAGC-
                                                                   GTGCACTCGGCCCCAGCAGCCTGCCCTACCTG-----CACAGCCCCATCACCACCTCT 1226
                                                                                                                                                                        ProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSer
                                                                                                                                        ACCTCGCAGTTCGTCTTCAGCTTTCCGGTC---TCCGTGGGC
                                                                                                                                                                                                                                                                                                                                                    1058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                878
                                                                                                                                                                          359
                                                                                                                                                                                                                                             339
                                                                                                                                                                                                                                                                                1091
                                                                                                                                                                                                                                                                                                                  319
                                                                                                                                                                                                                                                                                                                                                                                                                                                        279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             259
                                                                                                                                                                                                                                                                                                                                                                                                                        998
```

Search completed: February 14, 2005, 11:12:06 Job time : 328.645 secs

This Page Blank (uspto)

```
Command line parameters:

-MODEL=frame+ p2n.model -DEV=xlp
-MODEL=frame+ p2n.model -DEV=xlp
-MODEL=frame+ p2n.model -DEV=xlp
-Q=/cgn2 1/USETO_spool_p/US10029345/runat_09022005_091209_25846/app_query.fasta_1.1294
-DB=PublIshed_App_lications_NA -QFMT=fastap_ -SUFFIX=p2n.rmpb -MINMATCH=0.1
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MARTIX=blosum62
-TRANS=human40.cdi -LIST445 -DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100
-THR_MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=2000000000 -USER=US10029345_@CGN 1 1 879_@runat_09022005_091209_25846
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NGG_SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPDXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .
                                                                                                                                                                                                                                                  5378673 seqs, 2950229984 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              February 14, 2005, 10:56:55; Search time 887.813 Seconds (without alignments) 4419.632 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Published_Applications_NA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MAHEMIGTQIVTERLVALLE.....LGKVGSQSSFSGSMEIIEVS 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-029-345A-109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.
                   /cgn2_6/ptodata/2/pubpna/PCTUS_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/USOB_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/USOB_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/USOB_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/USOB_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/USOB_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/USOB_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/USOB_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/USIOB_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/USIOE_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
6/ptodata/2/pubpna/US60_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7.0
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	a	O	O	O									,																													Result	
45	44	3	42	41	40	39	38	37	36	35	4	w	٧	ა ს 1) K	28	27	26	25	24	23	3 5	2 6	2 5	, E	17	16	15	14	٦ ا	12 1	10	9	80	7	σ	տ	4	u i	N	-	No.	
869		703	703	707	N	724	N	72	'n	26	0	1643.5		3358.5	֝֝֝֝֝֝֝֝֝֝֝֝֝ עני	3399		Ä	•	٠.			3406		3406	3406	3406	3406	3406	3406	3406	3406	3406	3406	3406	3406	4	0	40	40	3406		
.0				٥.					۲	•	8	ъ.	۱۳	98.3	٠.	φ.	۴	9	9	9	9 9	٥.	۰:	ט פ	ی د	•	9	9	9	9 :	0 ر	۰.	.9	9	9	9		9	9	99.6	99.6	ery	P
N	467	Š	467	425	461	461	461	418	2039	2476	2453	1916	3332	2200	2966	2102	5145	5145	5145	5145	5145	л <u>г</u>	7 L L	2742	5145	5145	\mathbf{r}	\sim	_	~ ·	J (3544	ıs	u	S	4	3059	J	9	ø	1998		
18	18	18	18	18		18		18	17	17	13	17		; ;	; =	17	18	18	18	18	18		, c	, L	. E	18	18					1 8 1 E					17	17	18	17	ا و	B	
-10-357-930-1087	0-357-930-4101	-10-357-930-4	-10-357-930-3190	-10-357-930-1071	-10-357-930-4134	0-357-930-4100	-10-357-930-3241	-10-357-930-1124	-10-072-012	10-220-120-2	10-005-858-	S-10-108-260A	9-964-277-20	-US-10-0/2-012-255	75-511-867-01-	10-094-749-6	-10-357-930-	-10-357-930-271	-10-357-930-271	-10-357-930-269	10-357-930-269	-10-357-930-268	10-157-910-966	30C-056	10-357-930-213	-10-357-930-21	-10-357-930-210	-10-357-930-209	-10-357-930-208	-10-648-593-11	7 2	-10-377-072-25	-10-377-072-2	09-816-494-1	S-10-370	9-964-277-1	-10-257-026-	10-168-506-	-10-377-072-2	US-10-377-072-	US-09-816-494-3	ID	
equence 108	equence 41017,	e 4086	nce 31909,	equence 10717,	nce	equence	e 3241	equence 1124	equence	equence 28,	e 1, ?	Sequence 2429,	quence 20, Ar	Sequence 255, App	equence 520,	Φ	equence 28675	e 27149,	e 27145,	equence 26923,	e 26912.	equence 26815.	0 0 0 0 0 0 0	2222	equence 21303,	21083,	2107	2096	20824	115	17. App	3 6	e 22	1, Ar	e 26	1, Appli	1, Appl	e 2, Appl	equence 27,	Sequence 27, App	Sequence 3, Appli	cription	

ALIGNMENTS

RESULT 1 US-09-816-494-3

```
; Sequence 3, Application US/09816494
   Patent No. US20020034807A1
; GENERAL INFORMATION:
   APPLICANT: Meyers, Rachel A.
   TITLE OF INVENTION: 38592 AND 21117, NOVEL DUAL SPECIFICITY
   TITLE OF INVENTION: HOSPHATASE MOLECULES AND USES THEREFOR
   FILE REFERENCE: 10448-030002
; CURRENT APPLICATION NUMBER: US/09/816,494
; CURRENT FILING DATE: 2001-03-23
; PRIOR APPLICATION NUMBER: US 60/191,858
   PRIOR FILING DATE: 2000-03-24
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: FRASTSEQ for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 1998
; TYPE: DNA
; ORGANISM: Homo Sapiens
US-09-816-494-3
```

8	Å Š	D Qy	dg Qy	Qy Db	Qy Db	Qy da	유왕	D Q	g 49	B &	B 8	B 8	A 40	g 49	D Qy	DB:	Score: Percent Best Loc	Alignment
uLeuHisLeuGluLysProAsn 3 	281 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300 	261 LysargMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr 280	241 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260	221 ProTrpleuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal 240	201 IleProGluSerHispheLeuArgValProValAsnAspSerPheCysGluLysIleLeu 220 	181 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200 U	161 ArgileLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180	141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160	121 LeualaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140	101 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120 	81 CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100 	61 ASPLYSVAlLeuileThrGluLeuileGlnHisSerAlaLySHisLySValASpileASp 80 	41 HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60 	21 SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40 	etAlaHisGluMetIleGlyThrGlnIleValThrG 	9-345A-109 (1-665) x US-09-816-494-3 (1-1998)	e: 3406.00 Matches: 198 ent Similarity: 99.85% Conservative: 1 Local Similarity: 99.70% Mismatches: 1	t Scores:
당 상	B 8	, B &	B 8	B 8	B 8	B &	gb Qy	Db Qy) P Q	D 07	o da	p &	B Q	р <i>Q</i>	B &	₽ \$) B Q	Db
661 IleIleGluValSer 665 1981 ATCATTGAGGTCTCC 1995	641 ArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetGlu 660 	121 LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn	GlnLygProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu 6 	581 AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg 600 			521 LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis 540 	01	SerLysargLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeu	AspLysGluGluAlaSerIIeProLysLysLeuGlnThrAlaArgProSerAspSerGln	41 LysLeucysGlnPheSerProValGlnGluGeuSerGluGlnThrProGluThrSerPro	SerSerSerGluagAlaleuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn	SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe		361 ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu 380 	341 CYSALBASDSETALBINKSERGIDALBALBGLYGIRAZGPROVBLH18PROALBSETVAL 360	GLUPTOVALPTOALAVALSerGLUGLYGLYGLIYGLYSSErGLUTHTPTOLEUSEPPTOPTO	CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT 9

Qy 41 HislleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60	Qy 21 SerGlyThrGluLysValLeuLleAspSerArgProPheValGluTyrAsnThrSer 40	Qy 1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu 20	/ Match: 99.65% Indels: 17 Gaps:)-029-345A-109 (1-665) x US-10-377-072-27 (1-1998)	Pred. No.: 0 Length: 1998 Score: 3406.00 Matches: 663 Percent Similarity: 99.85% Conservative: 1 Best Local Similarity: 99.70% Mismatches: 1	; LOCATION: (1)(1998) US-10-377-072-27 Alignment Scores:		NUMBER OF SEQ ID NOS: 114 SOPTWARE: PastSEQ for Windows Version 4.0 SEQ ID NO 27 LENGTH. 1998	PRIOR FILING DATE: 2001-03-23 PRIOR APPLICATION NUMBER: US 09 PRIOR FILING DATE: 2001-03-22 Remaining Prior Application dat	PRIOR FILING DATE: 2001-05-21 PRIOR APPLICATION NUMBER: US 60/205, PRIOR FILING DATE: 2000-05-19 PRIOR APPLICATION NUMBER: US 09/816.	PRIOR FILING DATE: 2001-04-25 PRIOR APPLICATION NUMBER: US 60/199, PRIOR FILING DATE: 2000-04-26 PRIOR APPLICATION NUMBER: US 09/861.	PRIOR FILING DATE: 2000-11-28 PRIOR APPLICATION NUMBER: US 60/187, PRIOR FILING DATE: 2000-03-07 PRIOR APPLICATION NUMBER: US 09/843.	PRIOR PRIOR PRIOR	; FILE REFERENCE: MPI03-0180MNIM; CURRENT APPLICATION NUMBER: US/10/377,072; CURRENT FILING DATE: 2003-02-27; PRIOR APPLICATION NUMBER: US 09/895,860	APPLICANT: TSAI, TITLE OF INVENTION TITLE OF INVENTION TITLE OF INVENTION	APPLICANT: APPLICANT: APPLICANT: APPLICANT:		US-10-377-072-27 ; Sequence 27, Application US/10377072 ; Publication No. US20040009501A1 ; GENERAL INFORMATION:	RESULT 2
B &	B 8	}	g dy	Qy Db	р <i>Q</i>	B 8	D Qy	Db Qy	D QY	Qy Db	Q y Db	ß 8	g Q	Qy dd	D Qy	Db Qy	Qy db	Дb
401 SETLEUABPLIELYBSETVISETYTSETATASETMECHARALBSETLEUH1EGLYFNE 420	Sergy yeeuhibueusera laabpargueus laabpserabiil yeeleuybargserrabiil	Proservalyzoservalidinproserieuieueiueueiueueiueurieueiueiueiueiueiueiueiueiueiueiueiueiue	41 CyBAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal	321 GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro 340 	301 GlnThrGlyAlaSerGlyProLysSerLysLeuLeuHisLeuGluLysProAsn 320 	281 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300 	261 LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr 280	241 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260 	221 ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal 240 	201 IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu 220 	181 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200 	161 ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180	ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr	121 LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140	101 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120 	81 Cy8SerGlnLy8ValValVyrA8pGlnSerSerGlnA8pValAlaSerLeuSerSer 100 	61 AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 80 	121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 180

```
RESULT 3
US-10-377-072-27
Sequence 27, Application US/10377072
Publication No. US20040157221A9
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals Inc.
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
APPLICANT: Hogan, Thomas Joseph
APPLICANT: Meyers, Rachel E.
APPLICANT: Weyers, Rachel E.
APPLICANT: Rudolph-Owen, Mark J.
APPLICANT: Rudolph-Owen, Laura A.
APPLICANT: Toun, Miyoung
APPLICANT: Toun, Miyoung
APPLICANT: Tong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPIO3-0180MIM
CURRENT APPLICATION NUMBER: US/10/377,072
                                                                                                                                                                                                                                                                                                                                                                                                                         1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                             IleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTCCACTGCATCGAAGTGGGAGCGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTTCCACCAGCCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                         1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                            665
                                                                                   AND 49933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1980
                                                                                   MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: DNA; ORGANISM: Homo Sa; PEATURE: ; PEATURE: ; NAME/KEY: CDS; LOCATION: (1)...(US-10-377-072-27
                                8
                                                                               밁
                                                                                                                δ
                                                                                                                                                           문
                                                                                                                                                                                        S
                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                     멹
                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-029-345A-109 (1-665) x US-10-377-072-27 (1-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-66-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR FILING DATE: 2000-06-29
PRIOR PILING DATE: 2000-06-29
PRIOR PILING DATE: 2000-01-28
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR PILING DATE: 2000-03-07
PRIOR PILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR PILING DATE: 2001-03-23
PRIOR FILING DATE: 2001-03-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 27
LENGTH: 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE:
                                        141
                                                                               361
                                                                                                                      121
                                                                                                                                                             301
      421
                                                                                                                                                                                                101
                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                              81
                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FastSEQ
    LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                           GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                 CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100
                                                                                                                                                                                                                                                                                                                                         AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 80
                                                                                                                                                                                                                                                                                                                                                                                                                     HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                               CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                    AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                     GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGTOGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for Windows
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
3406.00
99.85%
99.70%
99.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            See File Wrapper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                õ
```

片

160 420 140 360 300

240

60 180

120 40 60

480

8 밁 Ś

片 Ş 뫄 ঠ 문 8 멍 Ś 문 8 밁 ঠ 밁 Ś 밁 Ś 밁 8 밁 Ś 밁 S

Z

```
1381
                                                                                                                                                                                                                                                                                                   1141
                                                                                                                                               1321
                                                                                                                                                                                                                                                  1201
                                                                                                                                                                                                                                                                                                                                                    1081
                                                                                                                                                                                                                                                                                                                                                                                                      1021
                                               1441
                                                                                                                                                                                               1261
                                                                                                                                                                        441
                                                                                                                                                                                                                                                                                                                                                                           361
                      501
                                                                       481
                                                                                                                      461
                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                          401
                                                                                                                                                                                                                                                                                                                          381
                                                                                                                                                                                                                                                                                                                                                                                                                            341
                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                               SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
             SerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly 520
                                                            SerLysArgLeuHisSerValArgThrSerSerGerGlyThrAlaGlnArgSerLeuLeu
                                                                                                GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                              LysLeuCysGinPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro 460
                                                                                                                                                                                                                                                                                                                SerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerPhe
                                                                                                                                                                                                                                                                                                                                                               ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu 380
                                                                                                                                                                                                                                                                                                                                                                                                                  CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln
                                                                                                                                               AAGCTATGCCAGTTCTCCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT 1380
                                                                                                                                                                                                                                                                                                                                                    CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ccereeri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGACAAATCAGTAGATTTCATTGAGAAAGCAAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                     CTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                      480
                                                                                                                                                                                                                        1 440
                                               1500
                                                                                               1440
                                                                                                                                                                                                 1320
                                                                                                                                                                                                                                                  1260
                                                                                                                                                                                                                                                                                                                            400
                                                                                                                                                                                                                                                                                                                                                                                                                            360
1560
                                                                                                                                                                                                                                                                                                   1200
                                                                                                                                                                                                                                                                                                                                                    1140
                                                                                                                                                                                                                                                                                                                                                                                                   1080
                                                                       500
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             540
                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뭉
```

중 음

중 음

음 성

음 성 음

ঠ 🖁 ঠ

밁

 ક

밁

밁

S

음 중 음

S

8 8 8 8 8 8 8 8 8 8 8 8 8

```
Sequence 2, Application US/10168506
Publication No. US20040053229A1
GENERAL INFORMATION:
APPLICANT: PLOMMAN, GREGORY D.
APPLICANT: MARTINEZ, RICARDO
APPLICANT: MANNING, GERABD
APPLICANT: MANNING, GERABD
APPLICANT: SUDARSANAM, SUCHA
APPLICANT: FLANAGAN, PETER
APPLICANT: FLANAGAN, PETER
TITLE OF INVENTION: MAMMALIAN PROTEIN PHOSPHATASES
FILE REFERENCE: 038602/1351
CURRENT APPLICATION NUMBER: US/10/168,506
CURRENT APPLICATION NUMBER: US/10/168,506
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR PLENTH: 2002-06-21
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBE
                     S
                                                               몽
                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 4
US-10-168-506-2
                                                                                                                                                                                             US-10-029-345A-109 (1-665) x US-10-168-506-2 (1-2732)
                                                                                                                                                                                                                                                                                                                                                                        Score:
                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-168-506-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1861
                                                                              538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       561
. 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 IleIleGluValSer (
                     SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40
                                                                                 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                   MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGAAGCCAAGTGACAGAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                      0
3406.00
99.85%
99.70%
99.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      665
                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                      Gaps:
                                                                                 597
                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
```

```
1618
                                                                                                                                                                                            1498
                                                                                                                                                                                                                                                               1438
                                                                                                                                                                                                                                                                                                                                1378
                                                                                                                           1558
                                                                                                                                                                                                                                                                                                                                                                                                  1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1018
                          381
                                                                                         361
                                                                                                                                                           341
                                                                                                                                                                                                                              321
                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                281
                                                                                                                                                                                                                                                                                                                                                                                                                                 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41
   SerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerPhe
                                                                           ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu
                                                                                                                                           CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal
                                                                                                                                                                                          GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                            GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro
                                                                                                                                                                                                                                                                                 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn
                                                                                                                                                                                                                                                                                                                                                  IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                        CCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                         TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                                                                                                                            CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                                               ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                CTAGTGCACTGTTTAGCTGGGATCTCCCGGTCCGCCATCGCTATCGCCTACATCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSsrAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Hi8IleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                         LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTOTAGTOCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                          340
                        400
                                                        1677
                                                                                        380
                                                                                                                         1617
                                                                                                                                                                                          1557
                                                                                                                                                                                                                                                                                             320
                                                                                                                                                                                                                                                                                                                               1437
                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                  1377
                                                                                                                                                                                                                                                                                                                                                                                                                                 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1077
                                                                                                                                                                                                                                                               1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    657
Sequence 1, Application US/10257026

Publication No. US20040086859A1

GENERAL INFORMATION:
APPLICANT: Merck Patent GmbH

TITLE OF INVENTION: New dual specificity phosphatase
FILE REFERENCE: DUSP10KDWS

CURRENT APPLICATION NUMBER: US/10/257,026

CURRENT FILING DATE: 2003-11-07

NUMBER OF SEQ ID NOS: 3

SOFTWARE: Patentin Ver. 2.1

LENGTH: 3059

TYPE: DNA
                                                                                                                                                                                                                        RESULT 5
US-10-257-026-1
                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                      뮍
                                                                                                                                                                                                                                                                                                                                                                    5 유
                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                             2518
                                                                                                                                                                                                                                                                                                                                                                                                                2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1738
                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                              641
                                                                                                                                                                                                                                                                                                                                                                                                                                               621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1678 AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC 1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn
                                                                                                                                                                                                                                                                                                           IleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                ArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetGlu 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTTCCACCAGCCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACTGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                             2532
                                                                                                                                                                                                                                                                                                             665
```

2397

2457

2517

620

2337

2277 580

600

560

2157

2217

540

2097

520

2037

500

1977

480

1917

460

1857 440 1797 420

Ş 밁 S 밁 8 В 5 뭐 중 유

8 뮍 Ś 망 Ś

8 밁

밁 8 밁 S 멍

밁 Ś

Ś 밁 5 문 Ś 밁 8 밁 S 밁 S 밁

5

181 GlnGlnAsnGlyTleGlyTyrValLeuAsnAlaSerTyrThrCysProLy	YCysGlnArgAspValleuAsnLysGluLeuIle 1	Qy 141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160	QY 121 LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140	Qy 101 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsmSerValHisLeu 120	Qy 81 CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100	Qy 61 AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 80	Qy 41 HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60	Qy 21 SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40	MetIleGlyThrGlnIleV aTGATTGGAACTCAAATTG	99.65% Indels: 9 Gaps: 665) x US-09-964-277-1 (1-3496)	: imilari l Simil	; ORGANISM: Homo sapiens US-09-964-277-1 Alignment Scores:	SOFTWARE: FastSEQ for SEQ ID NO 1 LENGTH: 3496 TYPE: DNA		ດ	RESULT 6 US-09-964-277-1 ; Sequence 1, Application US/09964277 ; Patent No. US20020137170A1	Qy 661 IleIleGluValSer 665	2047 AGGTCACGGGAAGAGC
B &	р У	Db Q	}	, pp 25	, B &) Db Qy	QQ db	, B &) Db Qy	g dg	90 VQ	D Q	B &	Db Qy	Qy dd	da Qy	Qy db	σb
541 SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla 560 	521 LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis 540	OI SEPTOLEUH BATGSETGIYSETVALGINASDASNYYHISINTSETPRELEUPREGIY 	SerLyBargLeuhlsServalArgInresrsersergly/inralagInargSerLeuLeu	ASDLYSGIUGIUALASSETIEPTOLYSLYSLEUGINThrALARGPTOSSETASSETGIN	LysLeuCysGinPheSerProValGinGluLeuSerGluGinThrProGluThrSerPro LysLeuCysGinPheSerProValGinGluEuSerGluGinThrProGluThrSerPro LysLeuCysGinPheSerProValGinGluEuSerGluGinThrSerPro LysLeuCysGinPheSerProValGinGluEuSerGluGinThrSerPro LysLeuCysGinPheSerProValGinGluEuSerGluGinThrSerPro LysLeuCysGinPheSerProValGinThrSe	SerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn 4		Serglyweum steusera Laaspargteugluagserasmiysteutysargiserpne	ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu 3	341 CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal 360 	321 GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro 340 	301 GlnThrGlyAlaSerGlyProLyBSerLyBLeuLyBLeuLeuHiBLeuGluLyBProAsn 320 	281 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300 	261 LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr 280 	241 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260 	221 ProtrpleuasplysServalaspPheIleGlulysAlaLysAlaSerAsnGlyCysVal 240 	201 IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu 220	1102 CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT 1161

	Qy 41 HisileLeuGluAlaileAsmIleAsmCysSerLysLeuMetLysArgArgLeuGlnGln 60	SerGlyThrGluLy8ValLeuLeulleAspSerArgProPheValGluTyrAsnThrSer 	AHISGLUMETLEGLYTATGLALLEVALT	70-370-	0 Length: 3406.00 Matches: 99.85% Conservative: 99.70% Mismarches.	, ,	NUMBER OF SEQ ID NOS: 742 SEQ ID NO 261 LENGTH: 3521 TYPE: DNA	OF INVENTION: Related Diseases OF INVENTION: Related Diseases Note The Disease State Sta	S, P. MICK LLIAM I. AS D.	APPLICANT: CLARK, HILLARY APPLICANT: BRISDELL, HUNTE APPLICANT: BRISDELL, THIE APPLICANT: SCHORNERID, THE	Publication No. US20040258678A1 GENERAL INFORMATION: Patin Docket Preview APPLICAT: HODRAY: SABAH C.	SULT 7 -10-370-715B-261	661 IleIleGluValSer 665 2542 ATCATTGAGGTCTCC 2556	Qy 641 ArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetGlu 660	Oy 621 LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn 640	Qy 601 GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisgluGluSerProPheglu 620	Oy 581 AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg 600	Qy 561 ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer 580
Qy 421 SerS	401 1764	381 1704	Qy 361 Prose Db 1644 CCCAC	Qy 341 CYBA: Db 1584 TGTG	Qy 321 GluP	Qy 301 GlnTl Db 1464 CAGA	Qy 281 Iles	Qy 261 LysA: Db 1344 AAGA	Qy 241 LeuV: Db 1284 CTAG	Qy 221 ProTi	Qy 201 Ilep:	Qy 181 GlnG: Db 1104 CAGC	Qy 161 ArgI Db 1044 CGAA'	Qy 141 ThrL	Qy 121 LeuA Db 924 CTTG	101 864	81 804	61 744
erSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn 440	SSerValSerTyxSerAlaSerMetAlaAlaSerLeuH1961yPhe 4	erAlaspargLeuGluAspSerAsnLysLeuLysargSerPhe	ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu 380 	CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal 360 	GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro 340 GAACCTGTCCCTGCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC 1583	GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn 320 	IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300 	LyBArgMetAspMetSerLeuAspGluAlaTyrArgPheValLyBGluLyBArgProThr 280 	LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260 	ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsmGlyCysVal 240 	IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu 220 	GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200 	ArgileLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180 	ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160	LeuAlaGlyclyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140			

```
US-09-816-494-1

; Sequence 1, Application US/09816494
; Patent No. US20020034807A1
; GENERAL INFORMATION: 36692 AND 21117, NOVEL DUJ
; TITLE OF INVENTION: 38692 AND 21117, NOVEL DUJ
; TITLE OF INVENTION: PHOSPHATASE MOLECULES AND
; TITLE OF INVENTION UNMERS: US/09/816,494
; CURRENT FILING DATE: 2001-03-23
; PRIOR APPLICATION NUMBER: US 60/191,858
; PRIOR FILING DATE: 2000-03-24
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PASTSEQ FOR WINDOWS Version 4.0
; SEQ ID NO 1
; LENGTH: 3544
; TYPE: DNA
; ORGANISM: Homo sapiens
; NAME/KEY: CDS
; LOCATION: (589)...(2583)
                                                                                                                                                                                                                                                                                                                                                                                                           2484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1884
                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                       641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg
                                                                                                                                                                                                                                                                                                                                                                    IleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                                                                            ArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetGlu 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerLysArgLeuHisSerValArgThrSerSerGerGlyThrAlaGlnArgSerLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTTCCACCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                 2558
                                                                                                                                                                                                                                                                                                                                                                             665
                                                                                                                                                                                                             AND U
                                                                                                                                                                                                               USES
                                                                                                                                                                                                                             SPECIFICITY
                                                                                                                                                                                                                                                                                                                                                                                                           2543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      460
                                                                                  밁
                            밁
                                                   S
                                                                                                                                                                      S
                                                                                                             Ś
                                                                                                                                               뮹
                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                  片
                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                  片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-029-345A-109 (1-665) x US-09-816-494-1 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ŏ.
                               1429
                                                                                                                                                                                                                                                                     1189
                                                                                                                                                  1309
                                                                                                                                                                                                           1249
                                                                                                                                                                                                                                                                                                                               1129
                                                                                                                                                                                                                                                                                                                                                                                          1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1009
                                                                                                                   261
                                                                                                                                                                              241
                                                                                                                                                                                                                                        221
                                                                                                                                                                                                                                                                                                 201
                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                    161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21
GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn
                                                                                                      LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                     ArgileLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                           ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                        IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCCTATCGCCTACATCATG
                                                                                                                                                                                                           CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                    ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                               CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
3406.00
39.85%
99.70%
99.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3544
663
1
1
0
                             1488
                                                                                       1428
                                                                                                                   280
                                                                                                                                                1368
                                                                                                                                                                                                           1308
                                                                                                                                                                                                                                                                     1248
                                                                                                                                                                                                                                                                                                                               1188
                                                                                                                                                                                                                                                                                                                                                                                        1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         140
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            708
```

문 S 밁 8 밁 Ş 문 5 밁 S 밁 ঠ 밁 Ś 밁 S 밁 8 밁 S В 8 맑 δ 밁

```
1489
                                                                                                                                                                                                            2389
                                                                                                                                                                                                                                                                                                                                                                 2269
                                                                                                                                                                                                                                                                                                                                                                                                                                        2209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1729
                                                          2509
                                                                                                                                     2449
                                                                                                                                                                                                                                                                                      2329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1549
                                                                                                                                                                      621
                                                                                                                                                                                                                                                                                                                          581
                                                                                                                                                                                                                                                                                                                                                                                                    561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      321
                                                                                                                                                                                                                                 GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu
                                                                                                                                                                                                                                                                                                          AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGLyThrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro
IleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                                   ThrGluSerSerH18PheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTTCCACCAGCCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetGlu
                                                                                                                                                       LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn
                                                                                                                                                                                                            CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGGGGGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                      GCCTACAGCTGCAGCTAGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                 ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                          TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTGCCGACTCTGCTACCTCAGAGGCAGGAGACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                                 2328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1848
                                                                                                                                                                                                            2448
                                                                                                                                                                                                                                                                                      2388
                                                                                                                                                                                                                                                                                                                                                                                                                                          2268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1548
                                                                                                                                                                      640
                                                                                                                                                                                                                                                 620
                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                                                                    580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      340
```

S 밁 Ś 문 S 밁

밁

ક

밁

र्

δ

661

665

B र् 밁 S 밁 음 성 음

Ş 밁 S 밁 Ś ğ

ठ 문 밁 ঠ

र्

δ

문 S

밁

S

```
APPLICANT: KNOULLINGUMEN, AND LECKIES APPLICANT: Chun, Miyoung
APPLICANT: Teai, Fong-Ying
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION UNMERR: US 09/852, 860
PRIOR APPLICATION NUMBER: US 09/852, 860
PRIOR APPLICATION NUMBER: US 09/723, 806
PRIOR APPLICATION NUMBER: US 09/723, 806
PRIOR APPLICATION NUMBER: US 09/843, 297
PRIOR APPLICATION NUMBER: US 09/843, 297
PRIOR APPLICATION NUMBER: US 09/843, 297
PRIOR APPLICATION NUMBER: US 09/843, 297
PRIOR APPLICATION NUMBER: US 09/843, 297
PRIOR APPLICATION NUMBER: US 09/843, 297
PRIOR APPLICATION NUMBER: US 09/861, 801
PRIOR APPLICATION NUMBER: US 09/861, 801
PRIOR APPLICATION NUMBER: US 09/861, 801
PRIOR APPLICATION NUMBER: US 09/861, 801
PRIOR APPLICATION NUMBER: US 09/861, 494
PRIOR APPLICATION NUMBER: US 09/815, 494
PRIOR APPLICATION NUMBER: US 09/815, 494
PRIOR APPLICATION NUMBER: US 09/815, 494
PRIOR APPLICATION NUMBER: US 09/815, 494
PRIOR APPLICATION NUMBER: US 09/815, 494
PRIOR APPLICATION NUMBER: US 09/815, 494
PRIOR APPLICATION NUMBER: US 09/815, 494
PRIOR APPLICATION NUMBER: US 09/815, 494
PRIOR APPLICATION NUMBER: US 09/815, 494
PRIOR APPLICATION NUMBER: US 09/815, 494
PRIOR APPLICATION NUMBER: US 09/815, 494
PRIOR APPLICATION NUMBER: US 09/815, 494
PRIOR APPLICATION NUMBER: US 09/815, 494
PRIOR APPLICATION NUMBER: US 09/815, 494
PRIOR APPLICATION NUMBER: US 09/815, 494
PRIOR APPLICATION NUMBER: US 09/815, 494
PRIOR APPLICATION NUMBER: US 09/815,
                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (589)...
US-10-377-072-25
                                                    밁
                                                                                                                                                                         밁
                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                              US-10-029-345A-109 (1-665) x US-10-377-072-25 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 9
US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Fast
SEQ ID NO 25
LENGTH: 3544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 25, Appublication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Millennium Pharmaceuticals
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2569 ATCATTGAGGTCTCC
                                                          649
                                                                                                                  21
41
                                                                                         SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                         ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCAGAA
                                                                                                                                                                                                              MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                          AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Meyers, Rachel E. Williamson, Mark J. Rudolph-Owen, Laura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/10377072
No. US20040009501A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Glucksmann, Maria A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (2586)
                                                                                                                                                                                                                                                                                                                                                      0
3406.00
99.85%
99.70%
99.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Laura A
                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                  648
   60
                                                          708
                                                                                                                     40
```

, Qy bb	Qγ	Qу	ο _у	D Q	9 Q	Db Qy	B 8	β Q	QQ VQ	Qy dd	Qy Db	Db Qy	Qy db	Qy Db	B 8	B 8	рь
381 SerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerPhe 400	61 ProSerValProSerValGln 	341 CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal 360 	321 GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro 340 	301 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn 320 	281 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300 	261 LYBATGMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr 280 	241 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260 	221 ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal 240	201 IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu 220 	181 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200 	161 ArgileLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180 	141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160	121 LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140 	euLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 12 	tysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 1	T.—P 80 82	709 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 768
APPLICANT: Tsai, Fong-Ying; TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117, TITLE OF INVENTION: NOVEL 25869, 16816, 16839, 49937, 49931 AND 49933 MOLECULES; TITLE OF INVENTION: AND USES THEREFOR; FILE REFERENCE: MPIO3-0180MNIM; CURRENT APPLICATION NUMBER: US/10/377,072	APPLICANT APPLICANT APPLICANT APPLICANT	GENERAL INFORMATION: APPLICANT: Willennium Pharmace APPLICANT: Curtis, Rory A.J. APPLICANT: Logan, Thomas Jose APPLICANT: Clubras	Sequence Publicat	Qy 661 IJEIJEGINVALSER 665 Db 2569 ATCATTGAGGTCTCC 2583	641 ArgSerArgGluGluI 2509 AGGTCACGGAAGAG	Oy 621 LysGinPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn 640	601 GIMYsProSerAspArgAlaAspSerArgArgSerTrpHsGluGluSerProPheGlu	581 ALATY/SerCysSerGlnLeuProThrCysGlyAspGlnValTy/SerValArgArgArg [561 ThrGluSerSerHiePheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer	Qy 541 SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla 560	Qy 521 LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis 540	2089	Qy 481 SerLysArgLeuHisSerValArgThrSerSerGerGlyThrAlaGlnArgSerLeuLeu 500	Qy 461 AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln 480	Qy 441 LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro 460	Qy 421 SerSerSluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn 440	Db 1789 TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCATCCTTACATGGCTTC 1848

```
S
                                                                                                                                                                                                                                                                           ક
                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                  밁
                                                  ঠ
                                                                            밁
                                                                                          S
                                                                                                                      망
                                                                                                                                       S
                                                                                                                                                           문
                                                                                                                                                                                                             밁
                                                                                                                                                                                                                               ई
                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (589)...
US-10-377-072-25
            S
                                                                                                                                                                                                                                                                                                                                              US-10-029-345A-109 (1-665) x US-10-377-072-25 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR PILING DATE: 2000-06-29
PRIOR PILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR PILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR PILLING DATE: 2000-03-07
PRIOR PILLING DATE: 2001-04-25
PRIOR PILLING DATE: 2001-04-25
PRIOR PILLING DATE: 2001-04-26
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR PILLING DATE: 2001-05-21
PRIOR PILLING DATE: 2001-05-21
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR PILLING DATE: 2001-03-22
PRIOR PILLING DATE: 2001-03-22
PRIOR PILLING DATE: 2001-03-22
PRIOR PILLING DATE: 2001-03-22
PRIOR PILLING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOPTWARE: FASTSEQ
SEQ ID NO 25
LENGTH: 3544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                         No.:
                                                                              889
                                                                                                101
                                                                                                                       829
                                                                                                                                                                                                                                                         649
                                                                                                                                                                                                                                                                                                    589
             141
                                  949
                                                        121
                                                                                                                                                                 769
                                                                                                                                                                                                             709
                                                                                                                                            81
                                                                                                                                                                                      61
                                                                                                                                                                                                                                   41
                                                                                                                                                                                                                                                                             21
                                                                                                                                                                ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                 LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140
                                                                           AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                  CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                             CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                         HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                         AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                    SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                   ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                       Sapiens
                                                                                                                                                                                                                                                                                                                                                                    0
3406.00
99.85%
99.70%
99.65%
                                                                                                                                                                                                                                                                                                                                                                              Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                    3544
663
1
0
                                                                                                 120
            160
                                  1008
                                                                            948
                                                                                                                       888
                                                                                                                                                                                                                                                                                                   648
                                                                                                                                            100
                                                                                                                                                                 828
                                                                                                                                                                                       80
                                                                                                                                                                                                             768
                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                        708
                                                                                                                                                                                                                                                                             40
                S
                                           망
                                                                                                       Ş
                                                                                                                                뮍
                                                                                                                                                                      片
                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                   र्
                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                           정 유
                                                                                                                                               ð
                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
  2089
                                                                                                                                                                                                                         1789
                                                                                                                                                                                                                                                                  1729
                                                                                                                                                                                                                                                                                                                                                                                                                                               1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1129
                                                                                        1969
                                                                                                                                  1909
                                                                                                                                                                             1849
                                                                                                                                                                                                                                                                                                               1669
                                                                                                                                                                                                                                                                                                                                                          1609
                                                                                                                                                                                                                                                                                                                                                                                                     1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1249
                     501
                                                                 481
                                                                                                             461
                                                                                                                                                       441
                                                                                                                                                                                                   421
                                                                                                                                                                                                                                            401
                                                                                                                                                                                                                                                                                        381
                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                              341
                                                                                                                                                                                                                                                                                                                                                                                                                        321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           201
  SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe
                                                                                                                                                                                                                                                                 GlnGlnAenGlyIleGlyTyrValLeuAenAlaSerTyrThrCyeProLyeProAepPhe
                                                                                                                                                                                                                                                                                                              GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                  AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                              LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro
                                                                                                                                                                             TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                        SerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn
                                                                                                                                                                                                                                                                                                                                                                 CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                          TGTGCCGACTCTGCTACCTCAGAGGCAGCAGCACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ccercer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SGACAAAT CAGTAGATTT CATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                     520
                                             2088
                                                                  500
  2148
                                                                                                             480
                                                                                                                                  1968
                                                                                                                                                                             1908
                                                                                                                                                                                                                         1848
                                                                                                                                                                                                                                                                   1788
                                                                                                                                                                                                                                                                                        400
                                                                                                                                                                                                                                                                                                               1728
                                                                                                                                                                                                                                                                                                                                                          1668
                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1068
                                                                                        2028
                                                                                                                                                       460
                                                                                                                                                                                                   440
                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                     380
                                                                                                                                                                                                                                                                                                                                                                                                     1608
                                                                                                                                                                                                                                                                                                                                                                                                                         340
                                                                                                                                                                                                                                                                                                                                                                                                                                               1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        200
```

nt Similarity: 99.85% Conservative: 1 Local Similarity: 99.70% Mismatches: 1 Match: 99.65% Indels: 0 -029-345A-109 (1-665) x US-10-425-114-26234 (1-3625 1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArg	tiens Clone ID: LIB41 0 0 3406.00	; APPLICANY: Cao, Yongwei ; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With ; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement ; FILE REFERENCE: 38-21 (53313) B ; CURRENT APPLICATION NUMBER: US/10/425,114 ; CURRENT FILING DATE: 2003-04-28 ; NUMBER OF SEQ ID NOS: 73128 ; SEQ ID NO 26234 ; LENGTH: 3625	ESULT 11 S-10-425-114-3 Sequence 262 Publication b GENERAL INFOI APPLICANT: I APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT: APPLICANT:	641 ArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetGlu	OY 601 GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu 620	Qy 521 LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis 540
Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q	Qy Db	0 B Q B Q	0	\$ \$ \$ \$ \$ \$ \$	Q B Q B	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
1652 GAACCTGTCCCTGCTGTCTCAGAGGTTGGACAGAAAGCGAGACCCCTCAGTCCACCC 1711 341 CyshlahspSerAlaThrSerGluAlaGlyGlnArgProValHispToAlaSerVal 360	ATTATCTCCAAACTTCAATTTTCTGGGCCAACTCTGGACTATGAGAAGAATTAAGAACACTCCAACCTCCTGGACTATGAGAAGAATTAAGAACACTCAACTCCTGGACTATGAGAAGAATTAAGAACACTCCTGGACTATGAGAAGAAGAAGAATTAAGAACACTCCTGGACTATGAGAAGAAGAAGAACACACAC	241 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260	1232 CÁGCÁGÁÁTGGGTÁTTÁGTTÁTÁTGTGTÁAÁTGCCÁGAATÁCCTGTCCÁÁAÁGCCTGTT 1291 201 IleproGluserHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu 220	ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCACCACCACCTGCTTGCT	992 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 1051 121 LeuAlaGlyGlyPheAlaGluPheSexArgCysPheProGlyLeuCysGluGlyLysSex 140	

```
Sequence 17, Application US/10343357

Publication No. US20040058341A1

GENERAL INFORMATION:
APPLICANT: INCYTE GENOMICS, INC.; TANG, Y.Tom
APPLICANT: ELLIOTT, Vicki S.; RAMKUMAR, Jayalaxmi
APPLICANT: YAO, Monique G.; BURFORD, Neil
APPLICANT: WANG, Yumei E.; STEWART, Elizabeth A.
APPLICANT: GANDHI, Ameena R.; ARVIZU, Chandra S.
APPLICANT: LEE, Ernestine A.; HAFALIA, April J.A.
APPLICANT: LU, Dyung Aina M.; TRIBOULEY, Catherine M.
APPLICANT: LU, JOHN JEY BAUGHN, Mariah R.
APPLICANT: YUE, Henry; WARREN, Bridget A.
APPLICANT: NGUYEN, Danniel B.; CHAWLA, Narinder K.
                                                                                                                                                                                                                                                                                         RESULT 12
US-10-343-357-17
                                                                                                                                                                                                                                                                                                                                                                                                                                            2612
                                                                                                                                                                                                                                                                                                                                                           2672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1952
                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                           ATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                 IleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerProLeuH18ArgSerGlySerValGluAspAsnTyrH1sThrSerPheLeuPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                    665
                                                                        3
                                                                                                                                                                                                                                                                                                                                                                                                                                               2671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: KEARNEY, Liam
FILLE OF INVENTION: PROTEIN PHOSPHATASES
FILE REFERENCE: PI-0173 PCT
CURRENT APPLICATION UNMBER: US/10/343,357
CURRENT FILING DATE: 2003-01-28
PRIOR APPLICATION NUMBER: DCT/US01/23716
PRIOR FILING DATE: 2001-07-26
PRIOR APPLICATION NUMBER: US 60/221,679
PRIOR APPLICATION NUMBER: US 60/223,272
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR FILING DATE: 2000-08-16
PRIOR FILING DATE: 2000-08-16
PRIOR APPLICATION NUMBER: US 60/229,254
PRIOR APPLICATION NUMBER: US 60/229,254
PRIOR APPLICATION NUMBER: US 60/231,366
PRIOR APPLICATION NUMBER: US 60/231,366
PRIOR APPLICATION NUMBER: US 60/231,366
PRIOR FILING DATE: 2000-09-08
PRIOR APPLICATION NUMBER: US 60/231,366
PRIOR APPLICATION NUMBER: US 60/231,366
PRIOR PRIOR PRIOR DATE: 2000-09-08
PRIOR PRIOR PRIOR DATE: 2000-09-08
PRIOR PRIOR PRIOR DATE: 2000-09-08
PRIOR PRIOR PRIOR DATE: 2000-09-08
PRIOR PRIOR PRIOR DATE: 2000-09-08
PRIOR PRIOR PRIOR DATE: 2000-09-08
PRIOR PRIOR PRIOR DATE: 2000-09-08
PRIOR PRIOR PRIOR DATE: 2000-09-08
PRIOR PRIOR PRIOR DATE: 2000-09-08
PRIOR PRIOR PRIOR DATE: 2000-09-08
PRIOR PRIOR PRIOR DATE: 2000-09-08
PRIOR PRIOR PRIOR DATE: 2000-09-08
PRIOR PRIOR PRIOR DATE: 2000-09-08
PRIOR PRIOR PRIOR DATE: 2000-09-08
                                      닭
                                                                                 S
                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-029-345A-109 (1-665) x US-10-343-357-17 (1-3766)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-343-357-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc_feature
OTHER INFORMATION: Incyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc
                                                                                                                                                                                                                         838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              598
         161
                                                                                          141
                                                                                                                                                                              121
                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                                                                                    718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41
                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                                     HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                        ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                      CysSerGlnLysValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                             AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MetAlaHi8GluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
      ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                        CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                              LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                    GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                 ACTOTAGTOCOTACOTGCATTTOTCAGCOTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
3406.00
99.85%
99.70%
99.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ID No. US20040058341A1 7480570CB1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
```

Ś

밁 5 밁 ક 밁 8 문 र् 문 ફ 밁 ঠ 밁 Ś 밁 S 밁 Ś B ঠ 밁 ঠ 밁 δ

밁 S В

1017

957

897 120 837 100 777 80 60

40

304 CA	521
Cy 21 SEL Db 244 AGI	501 SerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly 520
1 4 F	481 SerLysArgLeuHisSerValArgThrSerSerGlyThrAlaGlnArgSerLeuLeu 500
-10-029-345 <i>[</i>	461 AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln 480
Percent Similarit Best Local Simila Query Match:	441 LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro 460
Alignment Scores:	421 SerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn 440
; LENGTH: 4790 ; LENGTH: 4790 ; TYPE: DNA ; ORGANISM: Hon	401 SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe 420
PRIOR FILING I NUMBER OF SEQ SOFTWARE: Pate	381 SerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerPhe 400
FILE REFERENCE CURRENT APPLICATION CURRENT FILING PRIOR APPLICATION	361 ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu 380
APPLICANT: BX	341 CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal 360
	321 GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro 340
2518	301 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn 320
2458 661	281 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300
N	261 LyskryMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr 280
2338	
2278	221 ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal 240
2218	201 IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu 220
2158 T	181 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200
Db 2098 CT	

ફ

밁 5 밁 Ś 밁 S 밁 ð 밁 Ş 片 Ś 밁 S 맑 S 밁 S 밁 S В Ş 밁 δ 뭐

음 성 음

Ś

8 8 8 8 8

밁

```
CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                         ity:
larity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ristol-Myers Squibb Company
ENTION: IDENTIFICATION OF GENES FOR PREDICTING ACTIVITY OF COMPOUNDS THAT
ENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR
ENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS
                                                     ..
                                                                                                                                                                                                                                                                                                             12 B
                                                                                                                                                                                                                                                                                                                                                                                                                                     CE: D0273 NP
ICATION NUMBER: US/10/648,593
NG DATE: 2003-08-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     .sIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                             ATION NUMBER: 60/406,385
DATE: 2002-08-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCATTGAGGTCTCC 2532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 erAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla
                                                                                                                                                                                                                                                                                                                                                                                   entIn version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ngaagccaagtgacagagctgactcgcggcggagctggcatgaagagagcccctttgaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC 2157
                                                                                                                                                                                                                                                                                                                                                                                                 ID NOS: 557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/10648593
. US20040106132A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |InLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .aTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                    (1-665) x US-10-648-593-115
                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                                                                                                             0
3406.00
99.85%
99.70%
99.65%
                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                      (1-4790)
                                                                                                                                                                                            4790
663
1
1
0
363
                         60
                                                     303
                                                                                  40
                                                                                                              243
                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2217
```

음 경

Ol GinThrGlyAlaSerGlyProLysSerLysLeuLeuHisLeuGluLysProAsn 3	CAGINGATICATICAGE LaG1yIleSerArgSerAl LaG1yIleSerArgSerAl LaG1yIleSerArgSerAl LaG1yIleSerArgSerAl Lag1yIleSerArgSerArgSerAl Lag1yIleSerArgSerAl Lag1yIleSerArgSerA	61 ArgileLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 1 [SPLYSValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 80
Oy 661 IleIleGluvalSer 665 Db 2164 ATCATTGAGGTCTCC 2178 RESULT 14 US-10-357-930-20824 Sequence 20824, Application US/10357930 Publication No. US20040259086A1 GENERAL INFORMATION: APPLICANT: Schlegel. Robert APPLICANT: Schlegel. Robert APPLICANT: Monahan, John TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF TITLE OF INVENTION: HUMAN PROSTATE CANCER TITLE OF INVENTION HUMAN PROSTATE CANCER TITLE OF INVENTION NUMBER: US/10/357,930 CURRENT APPLICATION NUMBER: 2003-02-04 PRIOR APPLICATION NUMBER: 2003-02-16 PRIOR APPLICATION NUMBER: 60/183,319 PRIOR APPLICATION NUMBER: 60/189,862 PRIOR APPLICATION NUMBER: 60/207,454	O1 GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu 620	Oy \$21 LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuGlyTrpHis 540	Qy 421 SerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn 440

8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

```
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n = A,T,C oz
US-10-357-930-20824
                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-12-13
PRIOR FILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FastSEQ for Windows Version 4.
SEQ ID NO 20824
LENGTH: 5145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-029-345A-109 (1-665) x US-10-357-930-20824 (1-5145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                    1129
                                                                                                                          1069
                                                                                                                                                                                1009
                                          201
                                                                                               181
                                                                                                                                                   161
                                                                                                                                                                                                         141
                                                                                                                                                                                                                                   949
                                                                                                                                                                                                                                                                                         889
                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                             829
                                                                                                                                                                                                                                                                                                                                                                                                  769
                                                                                                                                                                                                                                                                                                                                                                                                                                                       709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   589
                                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                  GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                               IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                     CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                           ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                              ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                     SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                   CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                            CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                  AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
3406.00
99.85%
99.70%
99.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ႙
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0011
                 1248
                                         220
                                                                    1188
                                                                                             200
                                                                                                                                                                              1068
                                                                                                                                                                                                        160
                                                                                                                                                                                                                                   1008
                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                            888
                                                                                                                                                                                                                                                                                                                                                                      100
                                                                                                                                                                                                                                                                                                                                                                                                 828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      40
                                                                                                                                                                                                                                                                                       948
                                                                                                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                                                                                                                                                                     768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                648
Ś
                   밁
                                             Ś
                                                                               유
                                                                                                                                                      Ś
                                                                                                                                                                                                           Ş
                                                                                                                           닭
                                                                                                                                                                                       B
                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                            뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      성 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        멁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             유 성
                            2269
                                                                                                                                     2149
                                                                                                                                                                                           2089
                                                                                                                                                                                                                                                                                                    1969
                                                                                                                                                                                                                                                                                                                                                         1909
                                                                                                                                                                                                                                              2029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1249
                                                   561
 581
                                                                                                          541
                                                                                                                                                               521
                                                                                                                                                                                                                     501
                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                            461
                                                                                                                                                                                                                                                                                                                                                                                  441
                                                                                                                                                                                                                                                                                                                                                                                                             1849
                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         221
AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg
                                                                                                                                                   LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis
                                                                                                                                                                                                                                                                                                                                                      LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro 460
                                                                                               SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla
                                                                                                                                                                                                         SerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly
                                                                                                                                                                                                                                                              SerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeu
                                                                                                                                                                                                                                                                                                                 AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln
                                                                                                                                                                                                                                                                                                                                                                                                                            SerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerPhe 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                       ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer
                                                                                                                                     CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCCTGGCAC
                                                                                                                                                                                                                                                AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                    GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                            TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                               2268
                                                                                                          560
                                                                                                                                     2208
                                                                                                                                                                                           2148
                                                                                                                                                                                                                                                2088
                                                                                                                                                                                                                                                                         500
                                                                                                                                                                                                                                                                                                    2028
                                                                                                                                                                                                                                                                                                                                                         1968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      380
                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                             1908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
```

ঠ 멍 ঠ 밁 8 밁 ठ S 문 Ś

Ś 밁

밁

Ś

밁 Ś 8

片 ঠ

밁

1 MetalaHisGluMetIleGlyThrGlnIleValTh 	99.65% Indels: 18 Gaps: 18 Gaps:	Pred. No.: 0 Length: 5145 Pred. No.: 3406.00 Matchee: 663 Percent Similarity: 99.85% Conservative: 1 Best Local Similarity: 99.70% Mismarchee: 1	INFORMATION: 930-20969	; ORGANISM: Homo sapiens ; FEATURE: ; NAME/KEY: misc_feature ; LOCATION: 1. 5144. 5145		PRIOR FILING DATE: 2000-07-18 PRIOR APPLICATION NUMBER: 60/255,281 PRIOR FILING DATE: 2000-12-13 NUMBER OF SEO ID NOS: 62232	; PRIOR FILING DATE: 2000-05-25; PRIOR APPLICATION NUMBER: 60/211,314 ; PRIOR APPLICATION NUMBER: 60/210,314 ; PRIOR APPLICATION NUMBER: 60/219,007	FILING DATE: 2000-0: APPLICATION NUMBER: FILING DATE: 2000-0: APPLICATION NUMBER:	FILING DATE: 2003-02-04 FILING DATE: 2003-02-04 FILICATION NUMBER: 09/785,276 LING DATE: 2003-02-16 FILICATION NUMBER: 60/183.319	OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND OF INVENTION: HUMAN PROSTATE CANCER REFERENCE: MRI-0079CN AND PROSTATE CANCER PREVENTION NUMBERS INS/10/357 930	; APPLICANT: Schlegel. Robert; APPLICANT: Endege, Wilson; APPLICANT: Endege, Wilson; APPLICANT: Monahan, John TITLE OF INVENTIONS (GROUP) APPLICANT OF THE MONAHAN (G	US-10-357-930-20969 ; Sequence 20969, Application US/10357930 ; Publication No. US20040259086Al ; GENERAL INFORMATION:					
Q B Q	g Qy	D Q	B 8	B &	B &	B 8	B &	g Q	g Qy	₽ <i>Q</i>	B &	B &	S S	g 9y	Qy dd	å S	dg VQ
361 ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu 380	341 CysalaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal 360 	321 GluproValproAlaValSerGluGlyGlyGlnLysSerGluThrproLeuSerProPro 340	301 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn 320 	281 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300	261 LysargMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr 280	241 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260	221 ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal 240	201 IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu 220 	181 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200	161 ArgileLeuDroAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180 	141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160	121 LeualaGlyGlyPhealaGluPheGerArgCysPheProGlyLeuCysGluGlyLysSer 140 	101 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120 	81 CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100	61 AspLysValleulleThrGluLeulleGlnHisSerAlaLysHisLysValAsplleAsp 80 	41 HisīleLeuGluAlaīleAsnīleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60 	21 SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40

8 8 8 8 8 8

중 유

8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

Search completed: February 14, 2005, 14:04:12 Job time: 940.813 secs

B & B & B &

```
Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                  Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OM protein - protein search, using sw model
     222221115
22222117
22232118
223432117
                                                                                                                                                                                                                                                                                                                                                    Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          88
    Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         eeq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         length: 0 length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                          Issued_Patents_AA:*

1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/1/iaa/backfIles1.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BLOSUM62
Gapop 10.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-029-345A-109_COPY_1_302
1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             513545 seqs, 74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        February 9, 2005, 12:00:17; Search time 19.363 Seconds (without alignments) 1164.285 Million cell updates/sec
   MAHEMIGTQIVTERLVALLE......PNFNFLGQLLDYEKKIKNQT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Copyright
                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                  DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gapext 0.5
          SUMMARIES
Sequence 2, Appli
Sequence 9121, Appli
Sequence 14, Appli
Sequence 15, Appli
Sequence 16, Appli
Sequence 2, Appli
Sequence 8486, Appli
Sequence 31, Appli
Sequence 11, Appli
Sequence 11, Appli
Sequence 805, Appli
Sequence 805, Appli
Sequence 805, Appli
Sequence 805, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 5, Appli
Sequence 5, Appli
Sequence 5, Appli
                                                                                                                                                                                                                                                                                                  Description
```

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28
346.5	346.5	346.5	349.5	351	357	357	357	357	357	357	377.5	408	409	409	409.5	415	415
22.2	22.2	22.2	22.3	22.4	22.8	22.8	22.8	22.8	22.8	22.8	24.1	26.1	26.2	26.2	26.2	26.5	26.5
168	168	168	397	384	302	302	302	302	302	302	393	421	314	314	313	449	367
4	4	4	N	4	4	4	4	4	4	4	N	4.	4	ω	N	4	4.
US-09-564-357-16	US-09-557-921-13	US-09-544-716-13	US-08-990-379-8	US-09-949-016-6494	US-09-658-824-806	US-09-589-184-806	US-09-671-325-806	US-09-614-124B-806	US-09-736-457-806	US-09-702-705-806	US-08-990-379-4	US-09-949-016-10488	US-09-221-448A-22	US-09-164-193-22	US-08-990-379-7	US-09-949-016-10840	US-09-919-497-60
Sequence 16, Appl	Sequence 13, Appl	Sequence 13, Appl	Sequence 8, Appli	Sequence 6494, Ap	Sequence 806, App	Sequence 806, App	Sequence 806, App	Sequence 806, App	•	•	Sequence 4, Appli	Sequence 10488, A	Sequence 22, Appl	Sequence 22, Appl	Sequence 7, Appli	Sequence 10840, A	Sequence 60, Appl

ALIGNMENTS

RESULT 1 US-09-816-494-2

```
Sequence 2, Application US/09816494

Patent No. 6664089

GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR
FILE REFERENCE: 10448-030002

CURRENT APPLICATION NUMBER: US/09/816,494

CURRENT FILING DATE: 2001-03-23

PRIOR APPLICATION NUMBER: US 60/191,858

PRIOR FILING DATE: 2000-03-24

NUMBER OF SEQ ID NOS: 10

SOPTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 2

LENGTH: 665
                     δ
                                                    밁
                                                                       र्
                                                                                                        밁
                                                                                                                              S
                                                                                                                                                              밁
                                                                                                                                                                                  S
                                                                                                                                                                                                              닭
                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                   ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-816-494-2
                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                             Matches 300;
                                                                                                                                                                                                                                                                                                                                           Local Similarity
 301
                         301
                                                                                                          181
                                                                                                                                    181
                                                      241
                                                                              241
                                                                                                                                                               121
                                                                                                                                                                                         121
                                                                                                                                                                                                                  _ဌ
                                                                                                      QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV 240
                                                                                                                                                                            LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
QT 302
                                                                    LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN 300
                                                      LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                              LAGGFABFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKBLM
                         302
                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                          99.2%;
                                                                                                                                                                                                                                                                                                                            Score 1552; DB 4;
Pred. No. 3.9e-161;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                       Length 665;
                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                            <u>;</u>
                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                    120
                                                                                                                                                               180
                                                                                                                                                                                                                                                                         60
```

```
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR PILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
PRIOR FI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 3
US-09-544-716-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-544-716-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 2
US-09-949-016-9121
                                                                                                                                                                                                                                                                                                                                                                                                                               Patent NO. ...
GENERAL INFORMATION:
Luche, Ralf M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CL001307
                                                                                                           SEQ ID NO 14
LENGTH: 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 14, Application US/09544716 Patent No. 6492157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local &
                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-9 DUAL-SPECIFICITY PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 9121, Application US/09949016 Patent No. 6812339
                                                                                                                                                                             FILE REFERENCE: 200125.415
CURRENT APPLICATION NUMBER: US/09/544,716
CURRENT FILING DATE: 2000-04-10
NUMBER OF SEQ ID NOS: 20
NUMBER OF SEQ ID NOS: 20
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         / Match 63.2%; Score 989; DB 4; Length 661; Local Similarity 63.1%; Pred. No. 2.1e-99; ndels 190; Conservative 55; Mismatches 54; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             277 QVIVHCLAGISRSATIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERSL 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MAHEMIGTQIV-TERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQ 59
                                                                                                                                                                                    FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   X 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CVLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNENFLGQLLDYEKKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LIQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LLAGGFAEFSRCFPGLCEGK-STLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKE 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MAGDRLPRKVMDAKKLASILRGGPGGPLVIDSRSFVEYNSWHYLSSVNICCSKLVKRRLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        K 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LMTQNGISYVLNASNSCPKPDFICESRFMRVPINDNYCEKLLPWLDKSIEFIDKAKLSSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ILTGGFATFSSCFPGLCEGKPAALLPMSLSQPCLPVPSVGLTRILPHLYLGSQKDVLNKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QGKVTIAELIQPAARSQVEATEPQDVVVYDQSTRDASVLAADSFLSILLSKLDGCFDSVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QDKVLITELIQHSAKHKVDIDCSQKVVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVH 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            . 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           96
```

```
APPLICANT: Luche, Ralf M.

APPLICANT: Wei, Bo
ITILE OF INVENTION: DSP-5 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125.413
CURRENT APPLICATION NUMBER: US/09/564,357
CURRENT FILING DATE: 2000-04-24
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 17
LENGTH: 170
LENGTH: 170
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:

APPLICANT: Luche, Ralf M.

APPLICANT: Wei, Bo

TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY

FILE REFERENCE: 200125.416

CURRENT APPLICATION NUMBER: US/09/557,921

CURRENT FILING DATE: 2000-04-20

NUMBER OF SEQ ID NOS: 20

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                    US-09-564-357-17
                                                                                                                                                                                                                                                                                                                                          US-09-564-357-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                           RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-557-921-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 4
US-09-557-921-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                               Sequence 17, Application US/09564357 Patent No. 6645753 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches 121; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 15, Application US/09557921
Patent No. 6551810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                        ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 170
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                      253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    134 GLCEGK-STLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELIQQNGIGYVLNAS 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 134 GLCEGK-STLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELIQQNGIGYVLNAS 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 253 TIAIAYIMKRMDMSLDEAYRFYKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             193 YTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSA 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 NSCPKPDFICESRFMRVPINDNYCEKLLPWLDKSIEFIDKAKLSSCQVIVHCLAGISRSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 GLCEGKPAALLPMSLSQPCLPVPSVGLTRILPHLYLGSQKDVLNKDLMTQNGISYVLNAS
                                                                                                                                                                                                                                                                                                                                                                                                                 TIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERTLK 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GLCEGKPAALLPMSLSOPCLPVPSVGLTRILPHLYLGSOKDVLNKDLMTONGISYVLNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERTLK 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ON: DSP-10 DUAL-SPECIFICITY PHOSPHATASE 200125.416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41.8%; Score 654.5; DB 472.5%; Pred. No. 1.4e-63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41.8%;
41.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Score 654.5; DB
; Pred. No. 1.4e-63
27; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
```

Query Match

Score 654.5;

B

4

Length 170;

```
GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-15 DUAL-SPECIFICITY PHO
TITLE REFERENCE: 200125.433
CURRENT APPLICATION NUMBER: US/09/955,732A
CURRENT FILING DATE: 2001-09-18
NUMBER OF SEQ ID NOS: 29
SOFTWARE: FASTSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-11 DUAL SPECIFICITY PHO
FILE REFERENCE: 200125.418
CURRENT APPLICATION NUMBER: US/09/619,380
CURRENT FILING DATE: 2000-07-19
NUMBER OF SEQ ID NOS: 22
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 16
LENGTH: 170
                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ş
                                                                                                                                                                                                                                                                        RESULT 7
US-09-955-732A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                             US-09-955-732A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-619-380-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-619-380-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                         SEQ ID NO 6
LENGTH: 155
TYPE: PRT
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 16, Application Patent No. 6649391 GENERAL INFORMATION:
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                           Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 121;
                                                                                                                                                                                                                                              Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                           253
                                                                                                                                                                                                                                                                                                                                                                                                         134 GLCEGK-STLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELIQQNGIGYVLNAS
                                                                                                                                                                                                                                           6, Application US/09955732A
                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      193 YTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSA 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  134 GLCEGK-STLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELIQQNGIGYVLNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121; Conservative
                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                 TIAIAYIMKKMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                      TIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NSCPKPDFICESRFMRVPINDNYCEKLLPWLDKSIEFIDKAKLSSCQVIVHCLAGISRSA
                                                                                                                                                                                                                                                                                                                            TIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERTLK 167
                                                                                                                                                                                                                                                                                                                                                                                                                                              GLCEGKPAALLPMSLSQPCLPVPSVGLTRILPHLYLGSQKDVLNKDLMTQNGISYVLNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERTLK 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GLCEGKPAALLPMSLSQPCLPVPSVGLTRILPHLYLGSQKDVLNKDLMTQNGISYVLNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                         sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    72.5%; =-
  39.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41.8%; Score 654.5; DB 4; 72.5%; Pred. No. 1.4e-63; ive 27; Mismatches 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US/09619380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. 1.4e-63; 7; Mismatches 18;
  Score 619; DB 4;
Pred. No. 9.3e-60;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                  252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          192
                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                   片
                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                           뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              닭
```

```
US-09-949-016-8486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-557-921-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-557-921-2
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR APPLICATION NUMBER: 60/237,768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Fa
                                                                                                                                                                                                                Sequence 8486, Application US/09949016 Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 30.0%;
Best Local Similarity 35.9%;
Matches 107; Conservative 69
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence 2, Application US/09557921
Patent No. 6551810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY FILE REFERENCE: 200125.416
CURRENT APPLICATION NUMBER: US/09/557,921
CURRENT FILING DATE: 2000-04-20
NUMBER OF SEQ ID NOS: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Luch
APPLICANT: Wei,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      407
                                                                                                                                                                                                                                                                                                                                                                                       243
                                                                                                                                                                                                                                                                                                                                                                                                                                   351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   293 CREVGGGASAASSLLPQPI--PTTPDIENAELTPILPFLFLGNEQDAQDLDTMQRLNIGY 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            173 VIIDCREFMEYNKSHIQGAVHINCADKISRRRLQQGKITVLDLISCREGKDSFKRIFSKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121 SDDAYRFVKORRPSISPNFNFLGQLLEYERTLK 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              147 ISOPCLPVANIGPTRILPNLYLGCORDVLNKELIQQNGIGYVLNASYTCPKPDFIPESHF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         27 LLIDSRPFVEYNTSHILEAININCS-KLMKRRLQQDKVLITELIQ-HSAKHKVDIDCSQK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 LSOPCLPVPSVGLTRILPHLYLGSOKDVLNKDLMTQNGISYVLNASNSCPKPDFICESRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                         VLNAS----YTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLV 242
                                                                                                                                                                                                                                                                                                                                                                                       HCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN 300
                                                                                                                                                                                                                                                                                                                                                                                                                                 VINVTTHLPLYHYEKGLF----NYKRLPATDSNKQNLRQYFEEAFEFIEEAHQCGKGLLI 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----STLVPTCISQPCLP-VANIGPTRILPNLYLGCQRDVLNKELIQQNGIGY 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IIVYDENTNEPSRVMPSQPLHIVLESLKREGKEPLVLKGGLSSFKQNHENLCDNSLQLQE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHLLAGGFAEFSRCFPGLCEGK-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                 HCQAGVSRSATIVIAYLMKHTRMTMTDAYKFVKGKRPIISPNLNFMGQLLEFEEDLNN 464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Luche,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Во
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ralf M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                65;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 469; DB 4;
Pred. No. 1.4e-42;
5; Mismatches 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 482;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                  USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         206
```

```
CURRENT APPLICATION NUMBER: US/09/371,671B
CURRENT FILING DATE: 1999-08-10
FRIOR APPLICATION NUMBER: 60/155,934
PRIOR FILING DATE: 1999-01-14
PRIOR APPLICATION NUMBER: 60/095,938
PRIOR FILING DATE: 1998-08-10
NUMBER OF SEQ ID NOS: 11
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 11
Ś
                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Дb
                                                             8
                                                                                                                                                                              ; LENGTH: 314
; TYPE: PRT
; ORGANISM: Mus musculus
US-09-371-671B-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 10
US-09-371-671B-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: PRT
; ORGANISM: Human
US-09-949-016-8486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 8486
LENGTH: 491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 11, Application US/09371671B Patent No. 6548743
                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: TRANSGENIC PLANTS EXPRESSING A TITLE OF INVENTION: DUAL-SPECIFICITY MAPK PHOSPHA: FILE REFERENCE: 00786/370002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Sheen, Jen
APPLICANT: Chiu, Wan-Ling
                                                                                                         104;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             137
     75
                                       13
                                                                      15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 110;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EKRPTISPNENFLGQLLDYEKKI 298
|: |||||||:|:::
MKKSNISPNENFMGQLLDFERTL 457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             --PTRILPNLYLGCQRDVLNKELIQQNGIGYVLNASYTCPKP-DFIPESHFLRVPVNDSF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKKRLQQDKVLITELIQHSA-KHKV
HKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKL--EKSFNSVHLLAGGFAEFSRCF 132
                                   LRALLREGAAQCLLLDCRSFFAFNAGHIAGSVNVRFSTIVRRRAKGAMGLEHIVPNAELR 72
                                                                  LVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELIQHSAK 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SQNLSQFFPEAISFIDEARGKNCGVLVHCLAGISRSVTVTVAYLMQKLNLSMNDAYDIVK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVK 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SFPVEILPFLYLGCAKDSTNLDVLEEFGIKYILNVTPNLPNLFENAGEFKYKQIPISDHW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CE--TNLDGSCSSSSPPLPVLGLGGLRISSDSSSDIESDLDRDPNSATDSDGSPLSNSQP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CEGKSTLVPTC-ISOPCLPVANIG------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TRRÉGTDTVVLÝDESSSDWNENTGGESVLGLLLKKLKDEGCRAFYLEGGFSKFQAEFSLH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LELGNERLLLMDCRPQELYESSHIESAINVAIPGIMLRRLQKGNLPVRALFTRGEDRDRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               29.8%; Score 466.5; DB 4; illarity 34.1%; Pred. No. 2.7e-42; Conservative 63; Mismatches 105;
                                                                                                        27.2%; Score 425; DB 4; Length 314; larity 34.3%; Pred. No. 5e-38; Conservative 48; Mismatches 129; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                  AND USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               45;
                                                                                                         22;
                                                                                                                                                                                                                                                                                                                                                                                                                                   THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 158
                                                                                                        σ
```

```
S
                                                             밁
                                                                                            S
                                                                                                                             밁
                                                                                                                                                           Ş
                                                                                                                                                                                              밁
                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-990-379-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-08-990-379-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Ver. SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Stork, Philip J
APPLICANT: Misra-Press, An
                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patent No. 5998188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EARLIER APPLICATION NUMBER: 60/000,263
EARLIER FILING DATE: 1995-06-16
NUMBER OF SEQ ID NOS: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Mitogen Activated Protein Kinase Phosphatase cDNAs TITLE OF INVENTION: Their Biologically Active Expression Products FILE REFERENCE: 4104-000320VSA CURRENT APPLICATION NUMBER: US/08/990,379 CURRENT FILING DATE: 1997-12-15 EARLIER APPLICATION NUMBER: PCT/US96/10402 EARLIER FILING DATE: 1996-06-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH:
 310
                              296
                                                               250
                                                                                              236
                                                                                                                                191
                                                                                                                                                                                              133
                                                                                                                                                                                                                              133
                                                                                                                                                             176 NKELIQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKA 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                310 SQV 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             133
                                                                                                                                                                                                                                                                                                                                                                                               104;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              176 NKELIQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKA 235
                                                                                                                                                                                                                                                               73
                                                                                                                                                                                                                                                                                               75
                                                                                                                                                                                                                                                                                                                                  13
                                                                                                                                                                                                                                                                                                                                                               15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            73
                                                                                SNGCVLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFIGQLLDYE
SQV 312
                              KKI 298
                                                               AGGRVFVHCQAGISRSATICLAYLMRTNRVKLDEAFEFVKQRRSIISPNFSFMGQLLQFE
                                                                                                                                                                                                                              PGLCEGKSTLVPTCISQP------CLPVANI-----GPTRILPNLYLGCQRDVL
                                                                                                                                                                                                                                                               GRLLAGAYHAVVLLDERSASLDGAKRDGTLALAAGALCREARSTQVFFLQGGYEAFSASC 132
                                                                                                                                                                                                                                                                                              HKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKL--EKSFNSVHLLAGGFAEFSRCF 132
                                                                                                                                                                                                                                                                                                                                                           LVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELIQHSAK
                                                                                                                             RKDMLDALGITALINVSANCPN-HFEGHYQYKSIPVEDNHKADISSWFNEAIDFIDSIKD
                                                                                                                                                                                              PELCSKOST--PTGLSLPLSTSVPDSAESGCSSCSTPLYDQGGPVEILSFLYLGSAYHAS
                                                                                                                                                                                                                                                                                                                                <u>LRALLREGAAQCLLLDCRSFFAFNAGHIAGSVNVRFSTIVRRAKGAMGLEHIVPNAELR</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/08990379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               KKI 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RKDMLDALGITALINVSANČPN-HFEGHYQYKSIPVEDNHKADISSWFNEAIDFIDSIKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PELCSKQST--PTGLSLPLSTSVPDSAESGCSSCSTPLYDQGGPVEILSFLYLGSAYHAS 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PGLCEGKSTLVPTCISQP-----CLPVANI-----GPTRILPNLYLGCQRDVL 175
                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gp.
                                                                                                                                                                                                                                                                                                                                                                                                             27.2%; Score 425; DB 2; 34.3%; Pred. No. 6.3e-38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Anita
                                                                                                                                                                                                                                                                                                                                                                                               48;
                                                                                                                                                                                                                                                                                                                                                                                               Mismatches 129;
                                                                                                                                                                                                                                                                                                                                                                                                                             Length 367;
                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                               22;
                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                 309
                                                                                                                                                                                               190
                                                                                                                                                                                                                                                                                                                                72
                                                                                                                                                                                                                                                                                                                                                               74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               249
                                                                                                                                                                                                                                                                                                                                                                                              5
```

```
ঠ
                                                                                                        망
                                                                                                                                  ð
                                                                                                                                                                          밁
                                                                                                                                                                                                          ई
                                                                                                                                                                                                                                                   뭉
                                                                                                                                                                                                                                                                                 ঠ
                                 문
                                                                                                                                                                                                                                                                                                                                                                                             ; MOLECULE TYPE: peptide US-08-530-290-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-08-530-290-23
                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No. 5958721
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Marshall, Christopher of APPLICANT: Ashworth, Alan APPLICANT: Hughes, David Anthony TITLE OF INVENTION: Methods for Scrittle OF INVENTION: Therapeutic AC NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: (415) 576-03
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9-
FILING DATE: 10-FEB-1994
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TELECOMMUNICATION INFORMATION: TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 07-APR-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/GB94/00694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER: IIM PC COMPAtible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOPTWARE: PAtentin Release #1.0, Version
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/530,290
PILING DATE: 14-DEC-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 394 amino acids
TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Bastian, Kevin L.
REGISTRATION NUMBER: 34,774
REFERENCE/DOCKET NUMBER: 08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE:
                                                                    180
                                                                                                        157
                                                                                                                                           135
240 VLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKI 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  23, Application US/08530290
o. 5958721
                                                                                                                                                                                                                                               39 LPSG-GKCLLLDCRPFLAHSAGYILGSVNVRCNTIVRRR-AKGSVSLEQILPAEEEVRAR
                                                                                                                                                                              97
                                                                                                                                                                                                                  77
                                                                                                                                                                                                                                                                                    19
                                                                                                                                                                                                                                                                                                                        99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             94111-3834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 San Francisco
                                                                                                                                         LCEGKSTL-----VPTCISQP----CLPVA----NIGPTRILPNLYLGCQRDVLNKEL 179
                                                                                                                                                                                                                                                                      LESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELI--QHSAKHK 76
                                 LDALGITALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR 275
                                                                  IQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC 239
                                                                                                        FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM 216
                                                                                                                                                                            LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE 156
                                                                                                                                                                                                            VDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Two Embarcadero
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Marshall, Christopher John Ashworth, Alan
                                                                                                                                                                                                                                                                                                                    27.2%; Score 425; DB 2; Length 394; llarity 33.1%; Pred. No. 7e-38; Conservative 62; Mismatches 116; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Townsend and Townsend and Crew LLP o Embarcadero Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   UMBER: GB 9307250.2
07-APR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5) 5/6-0300
576-0300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Methods for Screening of Therapeutic Activity and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GB 9402573.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              084611-000000US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Substances
Yeast for U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      for Use Therein
                                                                                                                                                                                                                                                                                                                        22;
                                                                                                                                                                                                                                                 96
                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                      APPLICANT: APPLICANT:
                                                                  APPLICANT:
                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    157
```

```
; SOFTWARE: FastSEQ for Wi
; SEQ ID NO 805
; LENGTH: 394
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-702-705-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Fanger, Gary
APPLICANT: Vedvick, Tom
APPLICANT: Vedvick, Tom
APPLICANT: Retter, Marrick
APPLICANT: Retter, Marc
APPLICANT: Retter, Marc
APPLICANT: Fan, Liqun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FO
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C14
CURRENT APPLICATION NUMBER: US/09/702,705
CURRENT FILING DATE: 2000-10-30
NUMBER OF SEQ ID NOS: 1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 99; Conserve
                                                                                                                                                                                                                                                                                                                                       RESULT 14
US-09-702-705-827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 13
US-09-702-705-805
                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                             Sequence 827, Application US/09702705 Patent No. 6504010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence 805, Appl
Patent No. 6504010
APPLICANT: Mannion, Jane
APPLICANT: Fan, Liqun
TITLE OP INVENTION: COMPOSITIONS AND METHODS
TITLE OP INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240 VLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKI 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      217 LDALGITALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        135 LCEGKSTL------VPTCISQP----CLPVA-----NIGPTRILPNLYLGCQRDVLNKEL 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        97 LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              77 VDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG 134
                                                                                   Fanger, Gary
Vedvick, Tom
Carter, Darrick
Retter, Marc
Mannion, Jane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM 216
                                                                                                                                                                                                                                                                                                                                                                                                                                VLVHCQAGISRSATICLAYLMMXKRVRLEEAFEFVKQRRSIISPNFSFMGQLLQFESQV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bangur, Chaitanya
Lodes, Michael A.
                                                                                                                                                                                                   Bangur, Chaitar
Lodes, Michael
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                 Wang, Tongtong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Wang, Tongtong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                27.2%; Score 425; DB 4 ilarity 33.1%; Pred. No. 7e-38; Conservative 62; Mismatches 1
                                                                                                                                                                                                                        Chaitanya
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/09702705
                                                                                                                                                                                                                            ß
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        တ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 4; Length 394;
                                            FOR THE THERAPY AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  116; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FOR THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          THERAPY AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
```

```
CURRENT APPLICATION NUMBER: US/09/736,457
CURRENT FILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 1864
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 805
LENGTH: 394
TYPE: PRT
ORGANISM: Homo sapiens
US-09-736-457-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/702,705; CURRENT FILING DATE: 2000-10-30; NUMBER OF SEQ ID NOS: 1833; SOFTWARE: FastSEQ for Windows Version 3.0; SEQ ID NO 827; LENGTH: 394; TYPE: PRT; ORGANISM: Homo sapiens
US-09-702-705-827
                                         日
                    Ş
                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 15
US-09-736-457-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 8 Patent No.
                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 27.2%; Score 425; DB 4; Loset Local Similarity 33.4%; Pred. No. 7e-38; Matches 100; Conservative 64; Mismatches 113;
                                                                                                                                        Best Local
                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: COMPOSITIONS AND METHODS TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER FILE REFERENCE: 210121.478C15
                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           805, Application US/09736457
o. 6509448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              135
                                                                      19 LESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELI--QHSAKHK 76
                        77
                                                     39 LPSG-GKCLLLDCRPFLAHSAGYILGSVNVRCNTIVRRR-AKGSVSLEQILPAEEEVRAR 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19 LESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELI--QHSAKHK 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               39
                                                                                                                                      Similarity
VDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKI 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Fanger, Gary
Vedvick, Tom
Carter, Darrick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VLVHCQAGISRSATICLAYLMMKKRVRLEEAFEFVKQRRSIISPNFSFMGQLLQFESQV 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FCSKTKALAAIPPPVPPSATEPLDLGCSSCGTPLHDQGGPVEILPFLYLGSAYHAARRDM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LPSG-GKCLLLDCRPFLAHSAGYILGSVNVRCNTIVRRR-AKGSVSLEQILPAEEEVRAR
                                                                                                                                                                                                                                                                        FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LDALGITALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LCEGKSTL-----VPTCISQP-----C-LPVANI-GPTRILPNLYLGCQRDVLNKEL 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NOS: 1833
FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                      Fan, Liqun
Wang, Aijun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Bangur, Chaitar
Lodes, Michael
                                                                                                                                                                                                                                                                                                                                                                                                                       Mannion, Jane
                                                                                                                                                                                                                                                                                                                                                                                                                                          Retter, Marc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wang, Tongtong
Bangur, Chaitanya
                                                                                                                   27.2%; Score 425; DB 4; I larity 33.1%; Pred. No. 7e-38; Conservative 62; Mismatches 116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ß
                                                                                                                                                      DB 4; Length 394;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 4; Length 394;
                                                                                                                                                                                                                                                                                                                                                                          FOR
                                                                                                                                                                                                                                                                                                                                                                            THE THERAPY AND
                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           22;
                                                                                                                     22;
                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96
                                                                                                                     8
```

```
Ś
                                        Ş
                                                                                            밁
                                                                                                                                                                             밁
                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                      밁
                           240 VLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNF1GQLLDYEKKI
                                                                                                                                                                                            157
                                                                                               217 LDALGITALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR 275
                                                                                                                                            180 IQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC 239
                                                                                                                                                                                                                                                                                        97
                                                                                                                                                                                         FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM 216
VLVHCQAGISRSATICLAYLMMKKRVRLEBAFEFVKQRRSIISPNFSFMGQLLQFBSQV 334
                                                                                                                                                                                                                                      LCEGKSTL-----VPTCISQP----CLPVA-----NIGPTRILPNLYLGCQRDVLNKEL 179
                                                                                                                                                                                                                                                                                        LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE
                                               298
```

Search completed: February 9, 2005, 12:13:09
Job time: 20.363 secs

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-029-345A-109_COPY_1_302
1564
                                                                                                                                                                                                                                                               10:
12:
13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            February 9, 2005, 12:09:54; Search time 57.152 Seconds (without alignments) 1721.062 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1373511 seqs, 325702437 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gapop 10.0 , Gapext 0.5
: /cgn2_6/ptcdata/1/pubpaa/US07_PUBCOMB.pep:*
: /cgn2_6/ptcdata/1/pubpaa/US07_NEW_PUB.pep:*
: /cgn2_6/ptcdata/1/pubpaa/US06_NEW_PUB.pep:*
: /cgn2_6/ptcdata/1/pubpaa/US06_NEW_PUB.pep:*
: /cgn2_6/ptcdata/1/pubpaa/US07_NEW_PUB.pep:*
: /cgn2_6/ptcdata/1/pubpaa/US08_PUBCOMB.pep:*
: /cgn2_6/ptcdata/1/pubpaa/US08_PUBCOMB.pep:*
: /cgn2_6/ptcdata/1/pubpaa/US08_PUBCOMB.pep:*
: /cgn2_6/ptcdata/1/pubpaa/US08_PUBCOMB.pep:*
: /cgn2_6/ptcdata/1/pubpaa/US09A_PUBCOMB.pep:*
: /cgn2_6/ptcdata/1/pubpaa/US09A_PUBCOMB.pep:*
: /cgn2_6/ptcdata/1/pubpaa/US09A_PUBCOMB.pep:*
: /cgn2_6/ptcdata/1/pubpaa/US09B_PUBCOMB.pep:*
: /cgn2_6/ptcdata/1/pubpaa/US09B_PUBCOMB.pep:*
: /cgn2_6/ptcdata/1/pubpaa/US09B_PUBCOMB.pep:*
: /cgn2_6/ptcdata/1/pubpaa/US10C_PUBCOMB.pep:*
: /cgn2_6/ptcdata/1/pubpaa/US10D_PUBCOMB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Published Applications AA: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MAHEMIGTQIVTERLVALLE.....PNFNFLGQLLDYEKKIKNQT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1373511
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

13	12	11	10	9	8	7	6	ហ	4	ω	2	_	Result
1552	1552	1552	1552	1552	1552	1552	1552	1552	1552	1552	1552	1552	Score
99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	99.2	Query Match
690	690	665	665	665	665	665	665	665	665	665	665	662	Query Match Length DB
15	15	16	16	16	5	15	15	15	15	ø	9	15	E
US-10-072-012-703	US-10-072-012-679	US-10-377-072-26	US-10-648-593-247	US-10-648-593-240	US-10-257-026-2	US-10-343-357-7	US-10-168-506-14	US-10-072-012-680	US-10-377-072-26	US-09-964-277-2	US-09-816-494-2	US-10-072-012-258	ID
Sequence 703, App	Sequence 679, App		Sequence 247, App	Sequence 240, App	Sequence 2, Appli	Sequence 7, Appli	Sequence 14, Appl		Sequence 26, Appl	Sequence 2, Appli	Sequence 2, Appli	Sequence 258, App	Description

45	44	43	42	41	40	39	38	37	36	35	34	u u	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14
425	426	426	440.5	462.5	469	469	σ	469	566	619	619	620	631.5	646	654.5	•	654.5	654.5	654.5	654.5	807	837	985	988	1504.5	1514	1517	1544	1545	1545	1552
27.2		27.2	•	•	•	•	30.0	•	٠	•	•	•	40.4		•				41.8		51.6	53.5	63.0	63.2	96.2	96.8	97.0	98.7	98.8	æ	99.2
394	394	394	419	381	482	482	482	444	140	155	155	501	461	517	170	170	170	170	170	169	155	616	663	625	680	677	660	672	665	665	690
9	14	14	16	14	16	15	14	9	17	9	9	15	15	9	15	14	14	9	9	14	9	15	15	15	15	15	15	15	15	15	15
US-09-736-457-805	US-10-059-585-46	US-10-060-065-25	US-10-472-380-2	US-10-184-832-2	US-10-648-593-164	US-10-058-270A-130	US-10-346-356-2	US-09-964-899-47	US-10-803-738-12	US-09-955-732-6	US-09-964-277-6	US-10-072-012-702	US-10-072-012-701	US-09-964-277-21	US-10-655-073-16	US-10-405-808-16	US-10-314-058-14	US-09-847-519A-11	US-09-775-925-26	US-10-346-356-15	US-09-964-277-7	US-10-072-012-266	-10-072-012	US-10-072-012-699	-10-072-012	-10-072-012	US-10-072-012-682	-10-296-115	US-10-072-012-681	US-10-094-749-2312	US-10-425-114-54204
805,	46,			Sequence 2, Appli			æ	7,	Sequence 12, Appl	Sequence 6, Appli	σ		e 7(22		Ħ	e 14,	11,	Sequence 26, Appl	e 11	7, 7	Ņ	700,	699,	Œ	683,	e 682,	Sequence 1259, Ap	681,		Sequence 54204, A

ALIGNMENTS

```
APPLICANT: Lepley, Denise M.
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Sam
FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR PILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 1
US-10-072-012-258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 258, Applic Publication No. US20 GENERAL INFORMATION:
                                                                                                                                                                  APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Tchernev, Velizar APPLICANT: Spytek, Kimberly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                  Rastelli, Luca
Miller, Charles E.
Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
                                                                                                                                                                                                     Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P.
                                                                                                                                                                                                                                                             Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                Padigaru, Muralidhara
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gangolli, Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patturajan,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/10072012 o. US20040033493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Zerhusen, Bryan
                                                                                                                                                                                                                                                                                                                                                                                                                David W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Meera
                                                                                                                                 Same
```

```
Sequence 2, Application US/09816494
Patent No. US20020034807A1
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DU.
TITLE OF INVENTION: 98692 AND 21117, NOVEL DU.
TITLE OF INVENTION: PHOSPHATASE MOLECULES ANI
FILE REFERENCE: 10448-030002
CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; LENGTH: 662
; TYPE: PRT
; ORGANISM: Homo s
US-10-072-012-258
                                                                                                                                                                                                                                                                                                                                             RESULT 2
US-09-816-494-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 2001-01-31

PRIOR APPLICATION NUMBER: 60/265,395

PRIOR FILING DATE: 2001-01-31

PRIOR PRIOR PRIOR DATE: 2001-01-31

PRIOR PRIOR DATE: 2001-02-02

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR PILING DATE: 2001-02-05

PRIOR FILING DATE: 2001-02-05

PRIOR PILING DATE: 2001-02-07

PRIOR PRIOR PRIOR NUMBER: 60/266,975

PRIOR APPLICATION NUMBER: 60/266,975

PRIOR APPLICATION NUMBER: 60/266,975

PRIOR APPLICATION NUMBER: 60/266,975

PRIOR APPLICATION NUMBER: 60/266,975

PRIOR PRIOR PRIOR DATE: 2001-02-07

PRIOR PRIOR PRIOR DATE: 2001-02-08

PRIOR FILING DATE: 2001-02-08
                                                          SOFTWARE: FastSEQ for Windows Version SEQ ID NO \,2\,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 1391
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 258
LENGTH: 665
TYPE: PRT
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 2001-01-31
APPLICATION NUMBER: 60/265,412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/265,517
                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILBAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 옄:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DKVLITELIQHSAKHKVDIDCSQKVVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 1552; DB 15;
Pred. No. 2.1e-143;
                                                                                                                                                                                                                                            DUAL SPECIFICITY
                                                                                                                                                                                                                       AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       , 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
```

```
; sequence 2, Application US/09964277
; Patent NO. US20020137170A1
; GENERAL INFORMATION:
   APPLICANT: Luche, Ralf M.
   APPLICANT: Wei, Bo
   TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHO
   FILE REFERENCE: 200125.434
; CURRENT APPLICATION NUMBER: US/09/964,277
; CURRENT FILING DATE: 2001-09-25
; NUMBER OF SEQ ID NOS: 22
; SOFTMARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2
; ENGTH: 665
                        Ş
                                                         밁
                                                                                     Ś
                                                                                                                    밁
                                                                                                                                           Ś
                                                                                                                                                                               밁
                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                             ; TYPE: PRT; ORGANISM: Homo sapiens US-09-964-277-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 3
US-09-964-277-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-816-494-2
                                                                                                                                                                                                                                                                                                Query Match 99.3
Best Local Similarity 99.3
Matches 300; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 300;
                               241
                                                            181
                                                                                          181
                                                                                                                     121
                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                61
                                                                                                                                                                                                61 DKYLITELIQHSAKHKYDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                        1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                             QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                     LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM 180
                                                                                                                                   LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                                                                                                                                               DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                        MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DKYLITELIQHSAKHKYDIDCSQKVVVYIDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99.2%;

    Mismatches

                                                                                                                                                                                                                                                                                                                Score 1552; DB 9;
Pred. No. 2.2e-143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1552; DB 9;
Pred. No. 2.2e-143;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2.2e-143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PHOSPHATASE
                                                                                                                                                                                                                                                                                                                            Length 665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 665;
                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>,</u>
                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
   300
                                                            240
                                                                                                                                                 180
                                                                                                                                                                               120
                                                                                                                                                                                                            120
                                                                                                                                                                                                                                          60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                  0
```

S

301

```
δ
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US 09/895,860
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR PILLING DATE: 2001-06-29
PRIOR PILLING DATE: 2001-06-29
PRIOR PILLING DATE: 2000-06-29
PRIOR PILLING DATE: 2000-06-29
PRIOR PILLING DATE: 2000-01-28
PRIOR PILLING DATE: 2000-11-28
PRIOR PILLING DATE: 2000-11-28
PRIOR PILLING DATE: 2000-11-28
PRIOR PILLING DATE: 2000-03-07
PRIOR PILLING DATE: 2000-03-07
PRIOR PILLING DATE: 2001-04-25
PRIOR PILLING DATE: 2001-04-26
PRIOR PILLING DATE: 2001-04-26
PRIOR PILLING DATE: 2001-04-26
PRIOR PILLING DATE: 2001-04-26
PRIOR PILLING DATE: 2001-05-19
PRIOR PILLING DATE: 2001-05-21
PRIOR PILLING DATE: 2001-05-21
PRIOR PILLING DATE: 2000-05-19
PRIOR PILLING DATE: 2001-05-19
                             S
                                                                                 밁
                                                                                                                               ई
                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-377-072-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Remaining Prior Application data removed -
NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 26
LENGTH: 665
TYPE: PRT
ORGANISM: Homo Sapiens
S-10-377-072-26
                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 99.2%;
Best Local Similarity 99.3%;
                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 26, Application US/10377072 Publication No. US20040009501A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Chun, Miyoung
APPLICANT: T841, Fong-Ying
TITLE OP INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPI03-0180MNIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Millennium Pharmaceuticals
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 09/815,419
                                181
                                                                                 121
                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                              300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                        19
                                                                                                                                                                                                                                      61 DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                          1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                    LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLFVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                          MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                        DKVLITELIQHSAKHKVDIDCSQKVVVYXDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -입
                                                                                    LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Glucksmann, Maria A.
Meyers, Rachel E.
Williamson, Mark J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Curtis, Rory A.J.
Logan, Thomas Joseph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Rudolph-Owen, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2001-03
                                                                                                                                                                                                                                                                                                                                                                                                 1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1552; DB 15;
Pred. No. 2.2e-143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                       665;
                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                 180
                                                                                                                                                                                        120
                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                          60
```

```
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgess, Catherine B.
ITILE OF INVENTION: Proteins and Nucleic Acids Encoding Sam
FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR APPLICATION NUMBER: 60/265,395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                        US-10-072-012-680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-072-012-680
                                                                                                                                                                                                 PRIOR FILING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 680, Application US/10072012 Publication No. US20040033493A1 GENERAL INFORMATION:
                                                                                               SEQ ID NO 680
LENGTH: 665
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                          SOFTWARE: PatentIn
                                                                                                                                                        Remaining Prior Application data removed - See File Wrapper or PALM NUMBER OF SEQ ID NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Tchernev, Velizar
APPLICANT: Spytek, Kimberly
APPLICANT: Zerhusen, Bryan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                         ORGANISM: Homo sapiens
                                                                              TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 2001-01-31
APPLICATION NUMBER: 60/266,406
FILING DATE: 2001-02-02
                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/266,767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241 LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTIS PNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wolenc, Adam R.
Pena, Carol B. A
Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
Colman, Steven D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lepley, Denise M.
Rieger, Daniel K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Padigaru, Muralidhara
Anderson, David W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Miller, Charles E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patturajan,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Luca
99.2%;
Score 1552;
DB 15;
Length 665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
```

```
밁
                            Ś
                                                                                                Ś
                                                                    밁
                                                                                                                                     밁
                                                                                                                                                                   S
                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                        ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-168-506-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 6
US-10-168-506-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     묽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/168,506
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR FILING DATE: 2000-12-21
NUMBER OF SEQ ID NOS: 76
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 14
                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 300; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 14, Application US/10168506 Publication No. US20040053229A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 300; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: FLANAGAN, PETER
TITLE OF INVENTION: MAMMALIAN PROTEIN PHOSPHATASES
FILE REFERENCE: 038602/1351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: PLOWMAN, GREGORY D. APPLICANT: MARTINEZ, RICARDO APPLICANT: WHYTE, DAVID
                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 665
                                    181
                                                                                    121 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
   181
                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301 QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301 QT 302
                                                                                                                                     61
                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61 DKYLITELIQHSAXHKYDIDCSQKYVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                      ۳
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILBAININCSKLMKRRLQQ
                                                                                                                                                     DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                      MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
QNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFI
                        QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                 DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                    MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DKVLITELIQHSAKHKVDIDCSQKVVVYXDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MANNING, GERARD
SUDARSANAM, SUCHA
                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RON
                                                                                                                                                                                                                                                                                       99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99.3%; Pred. No. 2.2e-143; ative 1; Mismatches 1;
                                                                                                                                                                                                                                                                  Score 1552; DB 15;
Pred. No. 2.2e-143;
1; Mismatches 1;
                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       <u>,</u>
                                                                                                                                                                                                                                                                   Gaps
                                 240
                                                                180
                                                                                                                                                                   120
                                                                                                                                   120
                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                     0
```

```
Ş
                                                                                        밁
                                                                                                                                   á
                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. US20040058341A1 7480570CD1
US-10-343-357-7
                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: INCYTE GENOMICS, INC.; TANG, Y.Tom
APPLICANT: ELLIOTT, Vicki S.; RAMKUMAR, Jayalaxmi
APPLICANT: WAO, Monique G.; BUREVORD, Neil
APPLICANT: WANG, Yumei E.; STEWART, Elizabeth A.
APPLICANT: GANDHI, Ameena R.; ARVIZU, Chandra S.
APPLICANT: LEB, Ernestine A.; HAFALIA April J.A.
APPLICANT: LU, Dyung Aina M.; TRIBOULEY, Catherine M.
APPLICANT: GRIFFIN, Jennifer A.; BAUGHN, Mariah R.
APPLICANT: WUE, Henry; WARREN, Bridget A.
APPLICANT: NGUYEN, Danniel B.; CHAWLA, Narinder K.
APPLICANT: KEARNEY, Liam
APPLICANT: KEARNEY, Liam
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: NGUYEN, DATHELAN, NATI
APPLICANT: KEARNEY, LIAM
APPLICANT: KEARNEY, LIAM
TITLE OF INVENTION: PROTEIN PHOSPHATASES
FILE REFERENCE: PI-0173 PCT
CURRENT FILING DATE: 2003-01-28
PRIOR APPLICATION NUMBER: US/10/343,357
CURRENT FILING DATE: 2001-07-26
PRIOR FILING DATE: 2001-07-26
PRIOR FILING DATE: 2001-07-26
PRIOR FILING DATE: 2000-07-28
PRIOR APPLICATION NUMBER: US 60/221,679
PRIOR APPLICATION NUMBER: US 60/223,272
PRIOR FILING DATE: 2000-08-03
PRIOR PRILING DATE: 2000-08-03
PRIOR PILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR APPLICATION NUMBER: US 60/229,254
PRIOR PILING DATE: 2000-08-18
PRIOR PILING DATE: 2000-08-18
PRIOR PILING DATE: 2000-08-18
PRIOR PILING DATE: 2000-08-18
PRIOR PILING DATE: 2000-08-18
PRIOR PILING DATE: 2000-08-30
PRIOR PILING DATE: 2000-08-30
PRIOR PILING DATE: 2000-08-30
PRIOR PILING DATE: 2000-08-30
PRIOR PILING DATE: 2000-08-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 7
US-10-343-357-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 20
SOFTWARE: PERL Program
SEQ ID NO 7
LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 7, Application US/10343357 Publication No. US20040058341A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US
                                  181
                                                                                           121
                                                                                                                       121 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241 LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                 61
                                                                                                                                                                                                                           61 DKYLITELIQHSAKHKYDIDCSQKYVVYYDQSSQDVASLSSDCFLTYLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                       1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                        1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPMLDKSVDFIEKAKASNGCV
                                                                                                                                                                                              DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                              99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60/231,366
                                                                                                                                                                                                                                                                                                                                                                                                              Score 1552; DB 15; Length Pred. No. 2.2e-143; 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                 ç
                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                              120
                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
```

```
Sequence 2, Application US/10257026
Publication No. US20040086859A1
GENERAL INFORMATION:
APPLICANT: Merck Patent GmbH
TITLE OF INVENTION: New dual specificity phosphatase
FILE REFERENCE: DUSP10KDWS
CURRENT APPLICATION NUMBER: US/10/257,026
CURRENT FILING DATE: 2003-11-07
NUMBER OF SEQ ID NOS: 3
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2
LENGTH: 665
TYPE: PRT
ORGANISM: Homo sapiens
US-10-257-026-2
RESULT 9

(US-10-648-593-240)
(US-10-648-593-240)
(Sequence 240, Application US/10648593)

(Publication No. US20040106132A1)
(Publication No. US20040106132A1)

(Publication No. US20040106132A1)
(Publication No. US20040106132A1)
(Publication No. US20040106132A1)
(Publication Noternation of Genes for Predicting Activity of Compounds That ITILE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR ITILE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS
(PILE REFERENCE: D0273 NP
(CURRENT APPLICATION NUMBER: US/10/648,593)
(CURRENT FILING DATE: 2003-08-26)
(PRIOR APPLICATION NUMBER: 60/406,385)
(PRIOR APPLICATION NUMBER: 60/406,385)
(PRIOR APPLICATION NUMBER: 60/406,385)
(PRIOR APPLICATION NUMBER: 60/406,385)
(PRIOR APPLICATION NUMBER: 60/406,385)
(PRIOR APPLICATION NUMBER: 60/406,385)
(PRIOR APPLICATION NUMBER: 60/406,385)
                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                     용
                                                                                                                                                                                                                                                                                                                                                                                                      र्
                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 8
US-10-257-026-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 300; Conserv
                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                          읍
                                                                                                                                                                                                                                                                                        QT 302
                                                                                                                                                                                                                                                                                                                    LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                     LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                     LAGGFABFSRCFPGLCEGKSTLVPTCISQPCLFVANIGFTRILPHLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ę
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                            302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1552; DB 15;
Pred. No. 2.2e-143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                       ; LENGTH: 665
; TYPE: PRT
; ORGANISM: Homo &
US-10-648-593-247
   뭐
                       ঠ
                                                           닭
                                                                                  Ś
                                                                                                                    문
                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: PRT
; ORGANISM: Homo
US-10-648-593-240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-648-593-247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 10
                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/648,593
CURRENT FILING DATE: 2003-08-26
PRIOR APPLICATION NUMBER: 60/406,385
PRIOR FILING DATE: 2002-08-27
NUMBER OF SEQ ID NOS: 557
SOFTWARE: PatentIn version 3.2
SEQ ID NO 247
LENGTH: 665
                                                                                                                                                                               Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn version
SEQ ID NO 240
LENGTH: 665
                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 300; Conserv
                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
   121
                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                               300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                           61
                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13
                                                                                                                      .
                                                                                                                                                  \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QT 302
                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                        sapiens
                                                                                                                                                                                          99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1552; DI
Pred. No. 2.2e
1; Mismatches
```

```
Sequence 247, Application US/10648593

Publication No. US20040106132A1

GENERAL INFORMATION:
APPLICANT: Briscol-Myers Squibb Company
TITLE OF INVENTION: IDENTIFICATION OF GENES FOR PREDICTING ACTIVITY OF COMPOUNDS THAT
TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR
TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS
FILE REFERENCE: D0273 NP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNENFLGQLLDYEKKIKN 300
                      LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                      DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                 DKYLITELIQHSAKHKVDIDCSQKVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                         MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVBYNTSHILBAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MAHEMIGTQI VTERLVALLESGTEKVLLI DSRPFVEYNTSHI LEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                   MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILBAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                           Score 1552; DB 16;
Pred. No. 2.2e-143;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 16;
                                                                                                                                                                                                                                                                                                                          Length 665;
                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                              ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
180
                                                                                                                                       120
                                                                                                                                                                                   60
                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                0
```

```
Ś
                                                   망
                                                                          Ś
                                                                                                                                                                              ; SOFTWARE: FastSEQ f
; SEQ ID NO 26
; LENGTH: 66
; TYPE: PRT
; ORGANISM: Homo Sap
US-10-377-072-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-377-072-26
                                                                                                                Query Match
Best Local S
Matches 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 26, Application US/10377072 Publication No. US20040157221A9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                          Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
CURRENT FILING DATE: 2003-02-29
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 2000-06-29
FRIOR APPLICATION NUMBER: US 09/723,806
PRIOR FILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR FILING DATE: 2000-03-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Tsai, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPI03-0180MNIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Millennium Pharmaceuticals Inc. APPLICANT: Curtis, Rory A.J.
                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 09/815,419 FILING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 09/816,494 FILING DATE: 2001-03-23
                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 2001-05-21
APPLICATION NUMBER: US 60/205,508
FILING DATE: 2000-05-19
                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: US 09/861,801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 09/843,297 FILING DATE: 2001-04-25
                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 60/199,801
FILING DATE: 2000-04-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                  300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                     61
                                                                                                                               Similarity
DKYLITELIQHSAKHKYDIDCSQKYVYYDQSSQDYASLSSDCFLTYLLGKLEKSFNSYHL
                                                                  MÄHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ 60
                                                MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ន្ទ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QQQGIGYVLNASYTCPKPDFIPESHFLRVFVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Curtis, kory .... Curtis, kory .... Joseph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rudolph-Owen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Meyers, Rachel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 302
                                                                                                                Conservative
                                                                                                                                                                                              Sapiene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Miyoung
                                                                                                                               99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         chel E.
, Mark J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Maria A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Laura A.
                                                                                                                1:
                                                                                                             Score 1552; DB 16;
Pred. No. 2.2e-143;
1; Mismatches 1;
                                                                                                                                             DB 16;
                                                                                                                                                                                                                                                                                        See File Wrapper or PALM
                                                                                                               Indels
                                                                                                                                           Length
                                                                                                             ٥,
                  120
                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
   ę,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
 Prior A
```

```
RESULT 12
US-10-072-012-679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 679, Application US/10072012
Publication No. US20040033493A1
                                                                                     PRIOR FILING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR FILING DATE: 2001-02-07
                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/265,102
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/266,406
PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 60/266,767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Lepley, Denise M.
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding
                                            PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 60/265,395
PRIOR FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 2001-01-3
                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/265,412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                : Tchernev, Velizar
: Spytek, Kimberly
: Zerhusen, Bryan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QQNGIGYYLNASYTCPKPDPIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gerlach, Valerie
Taupier Jr, Raymo
Gusev, Vladimir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rastelli, Luca
Miller, Charles E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alsobrook II, John P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Furtak, Katarzyna
Grosse, William M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Padigaru, Muralidhara
Anderson, David W.
Rastelli, Luca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gangolli, Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patturajan,
Application NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Raymond
                        data removed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4
                      See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
```

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
APPLICANT: Lepley, Denise M.
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Enc.
FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR APPLICATION NUMBER: 60/265,517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-072-012-703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               / TYPE: PRT
/ ORGANISM: Homo sapiens
US-10-072-012-679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 703, Application US/10072012
Publication No. US20040033493A1
GENERAL INFORMATION:
APPLICANT: Tchernev, Velizar
APPLICANT: Spytek, Kimberly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOPTWARE: PatentIn Ver.
SEQ ID NO 679
LENGTH: 690
                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGFTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61 DKYLITELIQHSAKHKYDIDCSQKVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               26 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                  Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
Colman, Steven D.
Wolenc, Adam R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRFTISPNFNFLGQLLDYEKKIKN 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QQNGTGYVLNASYTCPKPDF1PBSHFLRVPVNDSFCEKTLPWLDKSVDF1EKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QT 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DKVLTTELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                   Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P.
                                                                                                                                                                                                                                                                                                                                                                                 Padigaru, Muralidhara
Anderson, David W.
                                                                                                                                                                                                                                                                                                                                                                                                                   Gangolli, Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                     Miller, Charles E.
                                                                                                                                                                                                                                                     Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patturajan, Meera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zerhusen, Bryan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99.2%;
                                                                                                                                                                                                                                                                                                                                                                      Luca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Score 1552; DI
; Pred. No. 2.3e-
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; DB 15;
2.3e-143;
                                                                                                                                      Encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            85
```

```
GENERAL INFORMATION:

APPLICANT: Liu, Jingdong
APPLICANT: Zhou, Yihua
APPLICANT: Kovalic, David K.
APPLICANT: Kovalic, David K.
APPLICANT: Screen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(5313) B
CURRENT TITLING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 54204
LENGTH: 690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/266,767
PRIOR FILING DATE: 2001-02-05
PRIOR FILING DATE: 2001-02-07
PRIOR FILING DATE: 2001-02-07
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILING DATE: 2001-02-08
PRIOR FILING DATE: 2001-02-08
PRIOR FILING DATE: 2001-02-08
PRIOR FILING DATE: 2001-02-08
PRIOR FILING DATE: 2001-02-08
PRIOR FILING DATE: 2001-02-08
PRIOR FILING DATE: 2001-02-08
PRIOR FILING DATE: 2001-02-08
PRIOR FILING DATE: 2001-02-08
PRIOR FILING DATE: PATENTINE
                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                           RESULT 14
US-10-425-114-54204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Homo sapiens US-10-072-012-703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Loca
Matches
                                                                                                                                                                                                                                                                                                      Sequence 54204, Application US/10425114
Publication No. US20040034888A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR FILING DATE: 2001-02-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                         326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              301 QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            86 DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLFVANIGPTRILFNLYLGCQRDVLNKELI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININGSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                         QT 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LAGGFAEFSRCFPGLCEGKSTLVPTCISOPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 1552; DB 15;
Pred. No. 2.3e-143;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ı
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         85
```

```
APPLICANT: SEKI, NACHIKO
APPLICANT: YOSHIKAWA, TSUTOMU
APPLICANT: VOSHIKAWA, TSUTOMU
APPLICANT: NAGAHARI, KENJI
APPLICANT: NAGAHARI, KENJI
APPLICANT: NAGAHARI, KENJI
APPLICANT: MASCHHO, YASUHIKO
TITLE OF INVENTION: NOVEL FULL-LENGTH cDNA
PILE REFERENCE: 084335/0160
CURRENT APPLICATION NUMBER: US/10/094,749
CURRENT APPLICATION NUMBER: 60/350,435
PRIOR APPLICATION NUMBER: G0/350,435
PRIOR APPLICATION NUMBER: JP 2001-328381
PRIOR APPLICATION NUMBER: JP 2001-328381
PRIOR FILING DATE: 2001-09-14
NUMBER OF SEQ ID NOS: 3381
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 2312
LENGTH: 665
TYPE: PAT
ORGANISM: Homo sapiens
US-10-094-749-2312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 15
US-10-094-749-2312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: Clone ID: LIB4119-028-H6_FLI.pep US-10-425-114-54204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: ISOGAI, TAKAO
APPLICANT: SUGIYAMA, TOMOYAS
APPLICANT: OTSUKI, TETSUJI
APPLICANT: WAKAMATSU, AI
APPLICANT: SATO, HIROYUKI
APPLICANT: ISHII, SHIZUKO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 2312, Application US/10094749 Publication No. US20030219741A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   / Match 99.2%;
Local Similarity 99.3%;
les 300; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241 LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEXRPTISPNFNFLGQLLDYEKKIKN 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           146 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                86 DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                 HIO, YURI
OTSUKA, KADRU
NAGAI, KEIICHI
IRIE, RYOTARO
TAMECHIKA, ICHIRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LAGGFAEFSRCFFGLCEGKSTLVPTCISQPCLFVANIGFTRILFNLYLGCQRDVLNKELI
                                                                                                                                                                                                                                                                                                                                                                                                                                 YAMAMOTO, JULY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QT 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                               ISONO,
YURI
                                                                                                                                                                                                                                                                                                                                                                                                                                                          SHIZUKO
TO, JUN-ICHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOMOYASU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1552; DB 15;
Pred. No. 2.3e-143;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 15; Length 690;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
```

```
Search completed: February Job time: 58.152 secs
                                                                               S
                                                                                                                                 Ś
                                                                                                                                                                                                                                               δ
                                                                                                           맑
                                                                                                                                                                   밁
                                                                                                                                                                                            á
                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
Matches 299; Conserva
                                                      301
                                                                                301
                                                                                                            241
                                                                                                                                                                   181
                                                                                                                                                                                               181
                                                                                                                                                                                                                           121
                                                                                                                              241 LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                    121 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                 13
                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                        1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                   QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                   DKYLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                      ġr 302
                                                                               QT 302
                                                                                                            LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                 QNGIGYVLNASNTCPKPDF1PESHFLRVPVNDSFCEK1LPWLDKSVDP1EKAKASNGCV
                                                                                                                                                                                                                                                                                DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                           LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTLILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                         MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                        98.8%;
             9
             2005, 12:28:42
                                                                                                                                                                                                                                                                                                                                                                                              Score 1545; DB 1
Pred. No. 1e-142;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                        DB 15;
                                                                                                                                                                                                                                                                                                                                                                                               2
                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                             665;
                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                             120
                                                                                                                                        300
                                                                                                                                                                    240
                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                               240
```

```
Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -MODEL-frame+ p2n.model -DEV=xlp
-Q=/cgn2 1/USPTO_spool_p/US10029345/runat_09022005_091208_25808/app_query.fasta_1.1294
-Q=/cgn2 1/USPTO_spool_p/US10029345/runat_09022005_091208_25808/app_query.fasta_1.1294
-DB=1ssued_patence_NA -QFMT=fastap -SUFFIX.p2n.rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=5its -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15
-MODE-LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MAILEN=0 -MAXLEN=200000000
-USER-US10029345_@CGN 1 1_141 @runat 09022005_091208_25808 -NCPU=6 -ICPU=3
-NO MMAP -LARGEGUERY -NEG_SCORES=0 -WAIT -DSPBLOKE=100 -NCGLOG
-DEV_TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Command line parameters:
-MODEL=frame+_p2n.model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
        988
467.5
466.5
464.5
426
                                                                                                                                                                                                                                                          Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                seq length: seq length:
                                                                                                                                                                                                                                                                                                                                                                                                                                924835
                                                                                                                                                                                                                                                      Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                            Issued Patente NA:*

1. /cgn2_6/ptodatta/1/ina/5A_COMB.seq:*
2. /cgn2_6/ptodatta/1/ina/5B_COMB.seq:*
3. /cgn2_6/ptodata/1/ina/6A_COMB.seq:*
4. /cgn2_6/ptodata/1/ina/6B_COMB.seq:*
5. /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
6. /cgn2_6/ptodata/1/ina/backfIles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-029-345A-109_COPY_1_302
1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1202784 segs, 818138359 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BLOSUM62
      99.

63.2

30.4

30.4

29.9

29.9

21.2

21.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       February 14, 2005, 09:42:14; Search time 133.355 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MAHEMIGTQIVTERLVALLE......
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Copyright
                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2000000000
    1998
3544
2351
2377
333
1830
2109
2109
2175
2475
13782
2240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                          B
US-09-816-494-3
US-09-916-494-1
US-09-949-016-3250
US-09-920-668-3
US-09-513-999C-2877
US-09-513-9911-1135
US-09-016-434-1135
US-09-016-434-1100
US-09-016-434-1100
US-09-371-671B-10
                                                                                                                                                                                                                                                        ij
                                                                                                                                                                                                                                                                                                                  SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0.5
7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3705.573 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (without alignments
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PNFNFLGQLLDYEKKIKNQT 302
                Sequence 3, Appli
Sequence 1, Appli
Sequence 3250, Ap
Sequence 3, Appli
Sequence 1877, Ap
Sequence 1, Appli
Sequence 1135, Ap
Sequence 1135, Ap
Sequence 2615, Ap
Sequence 14992, A
Sequence 1100, Ap
Sequence 1100, Ap
                                                                                                                                                                                                                                                          Description
    Sequence
Sequence
```

01000010000100000000000000000000000000	1087
425 425 425 425 425 425 425 425 425 425	4 4 4 4 4 2 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
00000000000000000000000000000000000000	777777
20064 20064	1238 1238 1238 1238 1238 1238
**************************************	u a a a a a
-09-702-705 -09-716-457 -09-671-325 -09-671-325 -09-68-824 -09-68-824 -09-68-824 -09-68-824 -09-68-824 -09-68-824 -09-68-824 -09-68-824 -09-68-824 -09-68-824 -09-949-016 -09-949-016 -09-949-016 -09-949-016 -09-949-016 -09-949-016 -09-949-016 -09-949-016 -09-949-016 -09-949-016 -09-949-016 -09-949-016 -09-949-016 -09-949-016 -09-949-016 -09-949-016 -09-949-016	-11 -80 -80 -80
equenc eq equenc eq equenc eq equenc eq eq eq eq eq eq eq eq eq eq eq eq eq	Sequence 11, Appl Sequence 803, App Sequence 803, App Sequence 803, App Sequence 803, App Sequence 803, App

ALIGNMENTS

```
US-10-029-345A-109_COPY_1_302 (1-302) x US-09-816-494-3 (1-1998)
                                                                                                                 Query Match:
                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                            Score:
                                                                                                                                                                                                   Pred. No.:
                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                              US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 1
US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 3, Application US/09816494
Patent No. 6664089
GEMERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR
FILE REFERENCE: 10448-030002
                                                                                                                                                                                                                                                                                                                                         SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FABSTSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                            LENGTH: 1998
TYPE: DNA
ORGANISM: Homo s
1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                               sapiens
                                                                                                               2.74e-200
1552.00
99.67%
99.34%
99.23%
                                                                                                               Conservative: Mismatches: Indels:
                                                                                                                                                                          Length:
Matches:
                                                                                              Gaps:
                                                                                                004
```

밁 á

21 ب

SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA

```
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DU
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND
FILE REFERENCE: 10448-030002
CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILLING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILLING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
                                                                                                                                                     RESULT 2
US-09-816-494-1
                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                            당
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                               뮍
                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                             ce 1, Application US/09816494
No. 6664089
                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                    281
                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                       261
                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                       221
                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                           CAGACT
                                                                                                                                                                                                                     GlnThr 302
                                                                                                                                                                                                                                            ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                           IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                           LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                             CTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCACCATCGCCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                           ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAAGAAAAAAGACCTACT
                                                                                                                                                                                                                                                                                                                                                                                               CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                              | IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGCAGAATGGGATTGGTTAAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLySSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspCysPheLeuTnrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTGGAACGGAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       906
                                                                           DUAL SPECIFICITY AND USES THEREFOR
                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                    280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            140
                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                      260
                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EQ ID ...
LENGTH: 35%.
TYPE: DNA
TYPE: DNA
ORGANISM: Homo SE
FEATURE:
NAME/KEY: CDS
NAME/KEY: CDS
COCATION: (589')
US-09-816-494-1
US-09-85-494-1
 S
                       뫄
                                         Ś
                                                                       뫄
                                                                                           8
                                                                                                                           밁
                                                                                                                                             Š
                                                                                                                                                                            밁
                                                                                                                                                                                           Ś
                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                         당
                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: FastSEQ for Windows Version SEQ ID NO 1
                          1309
                                                                           1249
                                                                                                                            1189
                                                                                                                                                                             1129
                                                                                                                                                                                                                               1069
                                                                                                                                                                                                                                                                                1009
                                                                                                                                                                                                     181
                                                                                                 221
                                                                                                                                                    201
                                                                                                                                                                                                                                                       161
                                                                                                                                                                                                                                                                                                         141
                                                                                                                                                                                                                                                                                                                                 949
                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                  688
                                                                                                                                                                                                                                                                                                                                                                                                         101
                                                                                                                                                                                                                                                                                                                                                                                                                                    829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      709
                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                      GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                              CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                              ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                  GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCAACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                        IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                             CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                               ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                               AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                           ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (589)...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (2583)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             7.39e-200
1552.00
99.67%
99.34%
99.23%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        x US-09-816-494-1 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
```

뭐 5

1368

1308

1188

200

1248

1128 180 1068 1008 140

948

100

888

828 80 60

40 648

768

δ

밁 ð 밁 S 밁

828

238 768

278 888 258

948

218

198 648

588 158

708

```
US-10-029-345A-109_COPY_1_302 (1-302) x US-09-949-016-3250 (1-2351)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 3
US-09-949-016-3250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-949-016-3250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 207012
SOPTWARE: FastSEQ for Windows Version
SEQ ID NO 3250
LENGTH: 2351
TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sequence 3250, Application US/09949016 Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND FILE REFERENCE: CL001307

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR FILING DATE: 2000-10-20

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 2000-09-08

PRIOR FILING DATE: 2000-09-08

PRIOR FILING DATE: 2000-09-08

PRIOR FILING DATE: 2000-09-08

PRIOR FILING DATE: 2000-09-08

PRIOR PILING DATE: 2000-09-08

PRIOR PILING DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1369
   469
                                                                 409
                                                                                                                                349
                                                                                                                                                                                                289
                                                                                                                                                                                                                                                          229
                                                                                                                                                                                                                                                                                                                                                                                         109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           281
                               120
                                                                                                 100
                                                                                                                                                                                                                                                                                                                          169
                                                                                                                                                              80
                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                          40
                                                                                                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                         TGGCATGTGCTCAGCTCCGTCAACATCTGCTCCTAGCTGGTGAAGCGGCGGCTGCAG
                    LeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLys 139
                                                               AspCysSerGlnLysValValTyrAspGlnSerSerGlnAspValAlaSerLeuSer 99
                                                                                                                                                                                                             SerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGln
                                                                                                                                                                                                                                                                                                                          CGGGGCGGGCCTGGGCCGCTGGTCATCGACAGCCGCTCCTTCGTGGAGTACAACAGC
                                                                                                                                                                                                                                                                                                                                           GluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThr
                                                                                                                                                                                                                                                                                                                                                                                      ATGGCTGGGGACCGGCTCCCGAGGAAGGTGATGGATGCCAAGAAGCTGGCCAGCCTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                               MetAlaHisGluMetIleGlyThrGlnIleVal---ThrGluArgLeuValAlaLeuLeu
   ATCCTCACTGGGGGCTTCGCCACCTTCTCCTCCTGCTTCCCCGGCCTCTGCGAGGGCAAG
                                                                                               SerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHis 119
                                                                                                                               ACGGAGCCACAGGACGTGGTGGTCTATGACCAGAGCACGCGGGACGCCAGCGTGCTGGCC
                                                                                                                                                                                            CAGGGCAAGGTGACCATTGCGGAGCTCATCCAGCCGGCTGCACGCAGCCAGGTGGAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAAC 1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGACT 1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.59e-123
989.00
81.40%
63.12%
63.24%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2351
190
55
54
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USES
 528
                                                               468
                                                                                                                                                                                            348
                                                                                                                                                                                                                                                                                          59
                                                                                                                                                                                                                                                                                                                          228
                                                                                                                                                                                                                                                                                                                                                        39
                                                                                                                                                                                                                                                                                                                                                                                        168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1428
                                                                                                                                                                                                                                                          288
S
                            밁
                                                            S
                                                                                          US-10-029-345A-109_COPY_1_302 (1-302) x US-09-920-668-3 (1-2377)
                                                                                                                                            Query Match:
                                                                                                                                                           Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                           Score:
                                                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 4
US-09-920-668-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                          US-09-920-668-3
                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/920,668
CURRENT FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 49
SEQ ID NO 3
LENGTH: 2377
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 3, Application US/09920668
Patent No. 6482644
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Lex M. Cowsert
APPLICANT: Brett P. Monia
TITLE OF INVENTION: ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 8 EXPRESSION
FILE REFERENCE: RTS-0246
                                                                                                                                                                                                                                                                    FEATURE:
NAME/KEY: CDS
LOCATION: (135)...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           529
                               135 ATGGCTGGGGACCGGCTCCCGAGGAAGGTGATGGATGCCAAGAAGCTGGCCAGCCTGCTG 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           140
20 GluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThr 39
                                                             MetAlaHisGluMetIleGlyThrGlnIleVal---ThrGluArgLeuValAlaLeuLeu 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleMetLyBArgMetABpMetSerLeuABpGluAlaTyrArgPheValLyBGluLyBArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACTTCATCTGCGAGAGCCGCTTCATGCGGGTCCCCCATCAACGACGACTACTGTGAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGlu 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ---SerThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAG 1011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lys 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAAGTCATCGTCCACTGTCTGGCTGGCATCTCCCGGCTCTGCCACCATCGCCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGACCCGCATCCTGCCTCACCTCTACCTGGGCTCGCAGAAGGACGTCCTAAACAAGGAT
                                                                                                                               2.21e-123
988.00
81.40%
63.12%
63.17%
                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                             2377
190
55
54
```

Best

밁 8 문 ક 밁 중 음 ঠ 밁 ई 밁 ঠ

음 성

```
Sequence 2877, Application US/09513999C
Patent No. 6783961
GENERAL INFORMATION:
APPLICANT: Dunas Milne Edwards, J.B.
APPLICANT: Dunclert, A.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags a
Patent No. 6783961
Patent No. 6783961
Patent REFERENCE: 59 US2.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                          RESULT 5
US-09-513-999C-2877
                                                                                                                                                                                                 1035
                                                                                                                                                                                                                         299
                                                                                                                                                                                                                                                  975
                                                                                                                                                                                                                                                                          279
                                                                                                                                                                                                                                                                                                    915
                                                                                                                                                                                                                                                                                                                                                     855
                                                                                                                                                                                                                                                                                                                             259
                                                                                                                                                                                                                                                                                                                                                                              239
                                                                                                                                                                                                                                                                                                                                                                                                        795
                                                                                                                                                                                                                                                                                                                                                                                                                              219
                                                                                                                                                                                                                                                                                                                                                                                                                                                        735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120 LeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  255 TGGCATGTGCTCAGCTCCAACATCTGCTGCTCCAAGCTGGTGAAGCGGCGGCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             40
                                                                                                                                                                                                                                                                                                 IleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArg
                                                                                                                                                                                                                                                                                                                                                                                                  AAG 1037
                                                                                                                                                                                                                         ProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIle 298
                                                                                                                                                                                                                                                                                                                                                    CAAGTCATCGTCCACTGTCTGGCTGGCATCTCCCGCTCTGCCACCATCGCCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                 CysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                      AspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnAspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIle
                                                                                                                                                                                                                                                 CCGTCCATCTCGCCCAACTTCAACTTCCTGGGCCAGCTGCTGGAGTACGAGCGCACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGATGACGCAAAATGGAATAAGCTACGTCCTCAACGCCAGCAACTCCTGCCCCAAGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ---SerThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACGGAGCCACAGGACGTGGTGGTCTATGACCAGAGCACGCGGGACGCCAGCGTGCTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATCCTCACTGGGGGCTTCGCCACCTTCTCCTCCTGCTTCCCGGGCCTCTGCGAGGGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AspCysSerGlnLysValValTyrAspGlnSerSerGlnAspValAlaSerLeuSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGGGGCGGGCCTGGGCGGCCTCGTCGACACCGCTCCTTCGTGGAGTACAACAGC
                                                                  Tags and
                                                                  Encoded
                                                                  Human
                                                                  Proteins
                                                                                                                                                                                                                                                 1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                198
                                                                                                                                                                                                                                                                                                  974
                                                                                                                                                                                                                                                                                                                          278
                                                                                                                                                                                                                                                                                                                                                  914
                                                                                                                                                                                                                                                                                                                                                                            258
                                                                                                                                                                                                                                                                                                                                                                                                     854
                                                                                                                                                                                                                                                                                                                                                                                                                             238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      119
                                                                                                                                                                                                                                                                                                                                                                                                                                                      794
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     254
                     Ş
                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
DB:
     밁
                                                  문
                                                                        δ
                                                                                                     밁
                                                                                                                          8
                                                                                                                                                  맑
                                                                                                                                                                             S
                                                                                                                                                                                                        ₽
                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                         US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                        ; LOCATION: 37
; OTHER INFORMATION:
US-09-513-999C-2877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 2877
LENGTH: 333
TYPE: DA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: 127..333
FEATURE:
NAME/KEY: misc_feature
LOCATION: 17
COTHER INFORMATION: h=a or c or
                                                                                                                                                                                                                                                                                                                                                                                                                                                            PEATURE:
NAME/KEY: UNSURE
37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc_feature LOCATION: 237 OTHER INFORMATION: w=a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: 58
OTHER INFORMATION: r=a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LOCATION: 19
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: misc_feature LOCATION: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LOCATION: 18
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: n=a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NAME/KEY: misc_feature
LOCATION: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
                          111
     299
                                                     239
                                                                                                                                                         119
                                                                                                      179
                                                                            91
                                                                                                                              71
                                                                                                                                                                                51
                                                                                                                                                                                                          59
                                                                                                                                                                                                                                  31
                                                                                                                                                                                                                                                                                    12
                                                                                                                                                                                                                                                          _
                                                                                                                                                                                                                                                         ThrGluArgLeuValAlaLeuLeuGluSerGlyThr-GluLysValLeuLeuIleAspSe
 euGluLysSerPheAsnSerValHisLeuLeuAla
                                                                                                                                                                                                                         rArgProPheValGluTyr-AsnThrSerHisIleLeuGluAlaIleAsnIleAsnCysS
                                                                erSerGlnAspValAlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysL
                                                                                                                  isSerAlaLysHisLysValAspIleAspCysSerGlnLysValValValTyrAspGlnS
                                                                                                                                                                      erLysLeuMetLysArgArgLeuGlnGlnAspLysValLeuIleThrGluLeuIleGlnH
                                                                                                                                                                                                         CCGGCCATTTGTGGAATACCAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCT
                                                    GCTCCCAAGATGTTGCCTCTCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGTAAAC
                                                                                                      ATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAWA
                                                                                                                                                        CCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ξ<u>=</u>g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             у=с
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Xaa=His
                                                                                                                                                                                                                                                                                                                                                5e-55
475.00
93.81%
93.81%
30.37%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ဝူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ဗူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rt
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ဝူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ი
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ព្ព
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          읁
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4
                                                                                                                                                                                                                                                                                                            x US-09-513-999C-2877
                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                     Gaps:
                          122
                                                                                                                                                                                                                                                                                                                                    106
5
3
                                                                                                                                                                                                                                                                                                            (1-333)
                                                    298
                                                                             111
                                                                                                     238
                                                                                                                              91
                                                                                                                                                        178
                                                                                                                                                                                71
                                                                                                                                                                                                         118
                                                                                                                                                                                                                                 51
                                                                                                                                                                                                                                                          58
```

밁 8 밁 S S

Ş 밁

밁 Ś 밁 8 밁 S 밁 Ş 吊 8 밁

В 8

S 밁 Ś 문 S 밁 S 밁

```
Best Local Similarity:
Query Match:
DB:
                                                              밁
                                                                                                                          밁
                                                                                                                                               Ş
                                                                                                                                                                                     밁
                                                                                                                                                                                                                ş
                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                          र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-029-345A-109_COPY_1_302 (1-302)
                       S
                                                                                         र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 6
US-09-557-921-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-557-921-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 1, Application US/09557921
Patent No. 6551810
GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-10 DUAL-SI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: FastSEQ for Windows Version SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PILE REFERENCE: 200125.416
CURRENT APPLICATION NUMBER: US/09/557,921
CURRENT FILING DATE: 2000-04-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ENGTH: 1830
    1191
                                                                                                                            1077
                                                                                                                                                                                       1020
                                                                                             188
                                                                                                                                                       168
                                                                                                                                                                                                                                                                                140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      603 GTCATCATTGACTGCAGGCCCTTCATGGAGTACAACAAGAGTCACATCCAAGGAGCTGTC
                               203
                                                                                                                                                                                                                   149
                                                                                                                                                                                                                                                 963
                                                                                                                                                                                                                                                                                                            903
                                                                                                                                                                                                                                                                                                                                           125
                                                                                                                                                                                                                                                                                                                                                                       843 CACATAGTCCTCGAGTCCCTGAAGAGAGAAGCAAAGAACCTCTGGTGTTGAAAGGTGGA
                                                                                                                                                                                                                                                                                                                                                                                                       105
                                                                                                                                                                                                                                                                                                                                                                                                                                     783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                723 CTAGACTTGATTTCCTGTAGGGAAGGCAAGGACTCTTTCAAGAGGATCTTTTCCAAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   27 LeuLeuIleAspSerArgProPheValGluTyrAsnThrSerHisIleLeuGluAlaIle
                                                                                                                                                                                                        GlnProCysLeuPro---ValAlaAsnIleGlyProThrArgIleLeuProAsnLeuTyr 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                             ValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSerAspCysPheLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACATTAACTGTGCCGATAAGATCAGCCGGCGGAGACTGCAGCAGGGCAAGATCACTGTC
GluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeuProTrp
                                                          GTCATCAACGTCACCCACTCATCTTCCCCCTCTACCACTATGAGAAAGGCCTGTTC-----
                                                                                             ValLeuAsnAlaSer----
                                                                                                                          CTTGGCAATGAGCAGGATGCTCAGGACCTGGACATGCAGCGGCTGAACATCGGCTAC
                                                                                                                                                       LeuGlyCysGlnArgAspValLeuAsnLysGluLeuIleGlnGlnAsnGlyIleGlyTyr 187
                                                                                                                                                                                                                                                 TGCCGGGAGGTGGGGGGGGCGCATCCGCGGCCTCGAGCTTGCTACCTCAGCCCATC---
                                                                                                                                                                                                                                                                                                           PheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLys-------
                                                                                                                                                                                                                                                                                                                                                                                                    ThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeuLeuAlaGlyGly 124
                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTATAGTTTATGATGAGAATACCAATGAACCAAGCCGAGTGATGCCCTCCCAGCCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThrGluLeuIleGln---HisSerAlaLysHisLysValAspIleAspCysSerGlnLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AsnīleAsnCysSer---LysLeuMetLysArgArgLeuGlnGlnAspLysValLeuIle
                                                                                                                                                                                     --- CCCACCACCCCTGACATCGAGAACGCTGAGCTCACCCCCATCTTGCCCCTTCCTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             469.00
57.72%
35.91%
29.99%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            6.29e-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DUAL-SPECIFICITY PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 x US-09-557-921-1 (1-1830)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches:
Indels:
                                                                                                                                                                                                                                                                             ----SerThrLeuValProThrCysIleSer 148
                                                                                          TyrThrCysProLysProAspPheIlePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1830
107
65
96
30
                               222
                                                                                                                          1136
                                                                                                                                                                                     1076
                                                                                                                                                                                                                                                 1019
                                                                                                                                                                                                                                                                                                            962
                                                                                             202
                                                                                                                                                                                                                                                                                                                                           139
                                                                                                                                                                                                                                                                                                                                                                       902
                                                                                                                                                                                                                                                                                                                                                                                                                                     842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   46
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                            Score:
                                                                             Pred. No.:
                                                                                        Alignment Scores:
                                                                                                                       US-09-016-434-1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 7
US-09-016-434-1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 1135, Apparent No. 650093
                                                                                                                                                                                                                                       TELEFAX: (650) 845-4166
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION:
TITLE OF INVENTION: PATHWAY GENE
NUMBER OF SEQUENCES: 1490
                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
ODERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/016.474
FILING TARM
                                                                                                                                                                                                                                                                                  REGISTRATION NUMBER: 37,071
REFERENCE/DOCKST NUMBER: 70,071
REFERENCE/DOCKST NUMBER: 70,071
REFERENCE/DOCKST NUMBER: 37,071
REFERENCE: (650) 855-0555
                                                                                                                                                                                                                                                                                                                             CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                 IMMEDIATE SOURCE:
LIBRARY: GENBA
                                                                                                                                                                                                                                                                                                                                                                                                                         CLASSIFICATION:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CORRESPONDENCE ADDRESS:
                                                                                                                                        CLONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STATE:
                                                                                                                                                                                  TOPOLOGY:
                                                                                                                                                                                                STRANDEDNESS:
                                                                                                                                                                                                            TYPE: nucleic acid
                                                                                                                                                                                                                          LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CITY: PALO ALTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1245 TTTGAAGAGGCTTTTGAGTTCATTGAGGAAGCTCACCAGTGTGGGAAGGGGGCTTCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               223 LeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysValLeuVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTCGGATGACCATGACTGATGCTTATAAATTTGTCAAAGGCAAACGACCAATTATCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThrIleSer
                                                                                                                                   g1418933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACTECCAGECTEGEGTCTCCCGCTCCGCCACCATCGTCATCGCTTACTTGATGAAGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMetLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CALIFORNIA
                                                                                                                                                                                                                         2109 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    B: INCYTE PHARMACEUTICALS, INC.
3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/09016434
)938
                                                                                                                                                    GENBANK
                                                                                                                                                                                  linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                      HEREWITH
                                                                                                                                                                                             single
   1.29e-52
467.50
53.56%
34.06%
29.89%
                                                                                                                                                                                                                                                                                                                  PA-0002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FOR THE DETECTION OF SIGNALING EXPRESSION
Conservative: Mismatches: Indels: Gaps:
                                                          Length:
Matches:
                                                                                                                                                                                                                                                                                                                  S
   2109
110
63
105
45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  6.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             242
```

```
RESULT 8
US-09-023-655-946
                                                                                                                                                                                                                                           S
     ; Sequence
                                                                                                       Ś
                                                                                                                                             밁
                                                                                                                                                                             ঠ
                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                     뫄
                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-029-345A-109_COPY_1_302 (1-302) x US-09-016-434-1135 (1-2109)
                                                                       1384 AGGACGCTG
                                                                                                                                            1324 ATGAAAAATCCAACATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1024
                                                                                                            296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   197
     946,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          116 AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeu 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              670 GAGAATACGGGCGGCGAGTCGTTGCTCGGGGCTGCTCAAGAAGCTCAAGGACGACGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               490 TCGTCGCACATCGAGTCGGCCATCAACGTGGCCATCCCGGGCATCATGCTGCGGCGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96 AlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                59 GlnGlnAspLysValLeuIleThrGluLeuIleGlnHisSerAla---LysHisLysVal
                                                                                                                                                                                                                                                                                                                                                                                                                            AATCTCTTTGAGAACGCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGG
                                                                                                                                                            GluLysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGlu 295
                                                                                                                                                                                                                                        IleAlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLys 275
                                                                                                                                                                                                                                                                                                                                                        TTGACGTGTTGGAGGAATTCGGCATCAAGTACATCTTGAACGTCACCCCCAATTTGCCG
                                                                                                         LysLysIle 298
                                                                                                                                                                                                                  GTGGCTTACCTTATGCAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAA
                                                                                                                                                                                                                                                                                    AAGAACTGTGGTGTCTTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACT 1263
                                                                                                                                                                                                                                                                                                          SerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAla
                                                                                                                                                                                                                                                                                                                                                                                      CysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAla 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                          LysPro---AspPhelleProGluSerHisPheLeuArgValProValAsnAspSerPhe 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LysGluLeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysPro 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCTTCCCAGTGGAGATCTTGCCCTTCCTACTTGGGCTGTGCCAAAGACTCCACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGGGGCTCGGGGCCTGCGGATCAGCTCTGACTCTTCCTCGGACATCGAGTCTGACCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AlaAsnIleGly-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----ProThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCCGGGCGTTCTACCTGGAAGGTGGCTTCAGTAAGTTCCAAGCCGAGTTCTCCCTGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspIleAspCys---SerGlnLysValValValTyrAspGlnSerSerGlnAsp---Val 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCGAG-----ACCAATCTAGACGGCTCGTGTAGCAGCTCGCCGCCGTTGCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CysGluGlyLysSerThrLeuValProThrCys---IleSerGlnProCysLeuProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCCGGCGCTGTGGCACCGACACAGTGGTGCTCTACGACGAGCAGCAGCAGCGACTGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGAAGGGTAACCTGCCGGTGCGCGCGCTCTTCACGCGCGGGGGGGACCGGGACCGCTTC 609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
   Application
   US/09023655
                                                                                                                                            1383
                                                                                                                                                                                                                1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; Patent No. 6607879
; GENERAL INFORMATION:
APPLICANT: Cocks, Benjamin G.
APPLICANT: Susan G. Stuart
APPLICANT: Susan G. Stuart
TITLE OF INVENTION: COMPOSITION FOR THE DET.
TITLE OF INVENTION: EXPRESSION
NUMBER OF SEQUENCES: 1508
CORRESPONDENCE ADDRESS: 1508
CORRESPONDENCE ADDRESS: INC.
STREET: 3174 PORTER DRIVE
COTTY: PALO ALTO
S
                                   문
                                                              δ
                                                                                                       밁
                                                                                                                                      Ş
                                                                                                                                                                             유
                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                              US-10-029-345A-109_COPY_1_302 (1-302) x US-09-023-655-946 (1-2109)
                                                                                                                                                                                                                                                                                                                                                        Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-023-655-946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 9
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-C
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TOPOLOGY: line
IMMEDIATE SOURCE:
LIBRARY: GENBA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: HEREWIT CLASSIFICATION: PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 2109 base pairs
                                    610
                                                                                                                                                                             490
                                                                                                                                                                                                            39 ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu
                                                                                                                                                                                                                                                                   19 LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                               AspIleAspCys---SerGlnLysValValValTyrAspGlnSerSerGlnAsp---Val 95
                                                                                                       CAGAAGGGTAACCTGCCGGTGCGCGCGCGCTCTTCACGCGCGAGGACCGGGACCGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          nuc
                                                                                                                                        GlnGlnAspLysValLeuIleThrGluLeuIleGlnHisSerAla---LysHisLysVal 77
                                                                                                                                                                                                                                                 AlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe 115
                                                                                                                                                                           TCGTCGCACATCGAGTCGGCCATCAACGTGGCCATCCCGGGCATCATGCTGCGGCGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g1418933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 eic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      single
                                                                                                                                                                                                                                                                                                                                                                     1.29e-52
467.50
53.56%
34.06%
29.89%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PA-0001
                                                                                                                                                                                                                                                                                                                                                                     Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FOR THE DETECTION OF BLOOD CELL GENE
                                                                                                                                                                                                                                                                                                                                                                                                                            Length: Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
```

669

609

```
Sequence 2615, Application US/09949016

Patent No. 6612339

GENERAL INFORMATION:

APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASS

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF

FILE REFERENCE: CLOO1307

CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR APPLICATION NUMBER: 60/247,768

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 60/231,498

RIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SOPTWARE: PASELSEQ for Windows Version 4.0

SEQ ID NO 2615

TYDEY DATE: 2475
                                                                                                                                                                                                                                                                                                                 US-09-949-016-2615; A); Sequence 2615; A)
                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                           र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                   용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                    1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCTCTTTGAGAACGCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGG 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TIGACGIGITGGAGGAATICGGCATCAAGIACATCITGAACGICACCCCCAATITGCCG
                                                                                                                                                                                                                                                                                                                                                                                    AGGACGCTG 1392
                                                                                                                                                                                                                                                                                                                                                                                                                  LysLysIle 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGAAAAAATCCAACATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAG 1383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GluLysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleAlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLys
:::||||||:::|||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LysGluLeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AlaAsnIleGly-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGGCTTACCTTATGCAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LysPro---AspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCTTCCCAGTGGAGATCTTGCCCCTTCCTACTTGGGCTGTGCCAAAGACTCCACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CysGluGlyLysSerThrLeuValProThrCys---IleSerGlnProCysLeuProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAGAACTGTGGTGTCTTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACT 1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ----ProThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGGGGCTCGGGGGCCTGCGGATCAGCTCTGACTCTTCCTCGGACATCGAGTCTGACCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGCCGGGCGTTCTACCTGGAAGGTGGCTTCAGTAAGTTCCAAGCCGAGTTCTCCCTGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGAATACGGGCGGGTCGTTGCTCGGGCTGCTCAAGAAGCTCAAGGACGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCGAG----ACCAATCTAGACGGCTCGTGTAGCAGCTCGCCGCCGCTGCCAGTG
                                                                                                                                                                                                                               ASSOCIATED OF DETECTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             158
                                         Ś
                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                              밁
                                                                                                             Ś
                                                                                                                                               밁
                                                                                                                                                                         5
                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-029-345A-109_COPY_1_302 (1-302) x US-09-949-016-2615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Human
US-09-949-016-2615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No.:
                                                                                                                                                                                                                                                                                                                                                   1053
                                  159
                                                                                                                                                                                                                                                                                                                                                                                                                   993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AspIleAspCys---SerGlnLysValValValTyrAspGlnSerSerGlnAsp---Val
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCGTCGCACATCGAGTCGGCCATCAACGTGGCCATCCCGGGCATCATGCTGCGGCGCCTG
               GTGGCTTACCTTATGCAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAA
                                                                                                 SerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAla 255
                                                                                                                                                                 CysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAla ::: ::: ::: ||||||::::||||:::
                                                                                                                                                                                                                ATCTCTTTGAGAACGCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGG
                                                                                                                                                                                                                                                                                TIGGACGIGIIGGAGGAAIICGGCATCAAGIACAICTIGAACGICACCCCCAAIITGCCG
                                                                                                                                                                                                                                                                                                    LysGluLeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AlaAsnIleGly-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeu 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAGAATACGGGCGGCGAGTCGGTGCTCGGGCTGCTCAAGAAGCTCAAGGACGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCCGGCGCTGTGGCACCGACACAGTGGTGCTCTACGACGAGCAGCAGCAGCACTGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGAAGGGTAACCTGCCGGTGCGCGCGCGCTCTTCACGCGCGGCGAGGACCGGGACCGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlnGlnAspLysValLeuIleThrGluLeuIleGlnHisSerAla---LysHisLysVal
                                                                                 AAGAACTGTGGTGTCTTGGTACATTGCTTTGGCTGGCATTAGCCGCTCAGTCACTGTGACT
                                                                                                                                               LysPro---AspPhelleProGluSerHisPheLeuArgValProValAsnAspSerPhe
                                                                                                                                                                                                                                                                                                                                                   TCCTTCCCAGTGGAGATCTTGCCCCTTCCTACTTGGGCTGTGCCAAAGACTCCACCAAC
                                                                                                                                                                                                                                                                                                                                                                               -----ProThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsn 176
                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGGGCTCGGGGGCCTGCGGATCAGCTCTGACTCTTCCTCGGACATCGAGTCTGACCTT 992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CysGluGlyLysSerThrLeuValProThrCys---IleSerGlnProCysLeuProVal 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCCGGGCGTTCTACCTGGAAGGTGGCTTCAGTAAGTTCCAAGCCGAGTTCTCCCTGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----accaatctagacgctcgtgtagcagcagctcgccgttgccagtg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2.33e-52
466.50
53.56%
34.06%
29.83%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2475
110
63
105
45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (1-2475)
                                                                                                                                                                                                                 1232
                                                                                                                                                                                                                                                                                 1172
                                                                                                                                                                                                                                                                                                                                                   1112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            77
                                                                                                                                                                                                                                                215
                                                                                                                                                                                                                                                                                                                  196
                                                                                                                                                                                                                                                                                                                                                                                                                                                    158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            88
```

Qy 178 178	Db 9238 GCAGGGCTTGCGGGAGGGCCCCGGCAGGGCTCGGGGGAGCGGGGAGCTGGCCAA 9297	Qy 178 178	Db 9178 GCATGGGTGGGGGCCCAGGAGGACCCCAGGCTCCCCACCCA	Qy 178 178	Db 9118 GGAGCGGGGATGAGGGAGGGAAGGAGCTGAAGGCAGTGGATGAGCTGGGTGTGGGAGAA 9177	Qy 178 178	Db 9058 GTGGAGTTCGGGGGGTGGTCAATGGGAAAGGGGGCAGGAGCTCCAGAAGCAGCTTGGCAGC 9117		Qy 162 IleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGlu 178	Qy 142 LeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThrArg 161	Db 8879 GGGGCTTCGCCACCTTCTCCTCCTGCTTCCCCGGCCTCTGCGAGGGCAAGCCTGCTGCC 8938	aGluPheSerArgC	US-10-029-345A-109_COPY_1_302 (1-302) x US-09-949-016-14992 (1-13782)	Match: 29,70% Indels: 4 Gaps:	Score: 464.50 Matches: 130 Percent Similarity: 29.60% Conservative: 25 Rest Local Similarity: 24.60% Mismarches: 25	ent Scores: 8.56e-51 Length:		; SOFTWARE: FastSEQ for Windows Version 4.0 ; SEQ ID NO 14992 ; LENGTH: 13782 ; TYPE: DNA	APPI FILI R OF	; PRIOR FILING DATE: 2000-10-03 ; PRIOR FILING DATE: 2000-10-03	; CURRENT FILING DATE: 2000-04-14 ; PRIOR APPLICATION NUMBER: 60/241,755	PERENCE: CL001307 APPLICATION NUMBER: US/09/949,016	; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED ; TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF	CANI	; Sequence 1492, Application US/09949016 ; Patent No. 6812319	RESULT 10	Db 1473 AGGACGCTG 1481	Qy 296 LysLysIle 298	Db 1413 ATGAAAAAATCCAACATATCCCCTAACTTCAACTTCATGGGTCAGCTGGACTTCGAG 1472	gProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAsp
Db 10377	10317		102		101	N	101	271	Db 10077	10017	ДБ 9957 Qy 232	, N	Db 9897	Qу 231	Db 9837	Оу 231	Qy 216 Db 9778	Qy 196 Db 9718	96	Db 9598		Db 9538	Qy 178	Db 9478	Оу 178	Db 9418	Qy 178	Db 9358	Qу 178	Db 9298
AT 9 F O THE I LEGGE F CAMELE CHARGE THE CHARGE TACTOR CHA		evallysglulys 2//		271	GGCTGCCCACTTGCACCAGAATGACCCCCACCGTCCAGGACCCGTGGCAAGGGAGGAGGAGGGC 10256		TACAGGTACCACCTTCCCCAGTCGCGCACTTGTGGCTCACAGCGTCGCTTCCCTTCCCCC 10196	271	TCTGCCACCATCGCCTACATCATCATGAAGAACCATGGGCATGTCCTCCGACGACGCC 10136	GATAMAGCCAAGCTCTCCAGCTGCCAAGTCATCACCACTGTCTGGCTGG	GGGCCAGGGAGAAGCTGTGCAGTCTTAGCCCTCACCTGGCCCCATGGCCCACCTGCCCA 10016LybAlaLybAlaSerAsnGlyCybValLeuValHisCybLeuAllaGlyIleSerArg 250		GAGGGGTCCCCAGGAAGTAGCCGGAACTGTTGGCAGTTGGGCGGGTGGGGTCCCCTACCT 9956	231	GGGCGGAGGGCAGCGGACCTGGCTAGAGGAAGGCTAGAGCTGTGTGTG		CysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGlu 231 :::	ProLysProAspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPhe 215	CTCCAGGATCTGATGACGCAAAAATGGAATAAGCTACGTCCTCAACGCCAGCAACTCCTGC	CTCCACCTTCACTCCGCCCCGAGCTTCTCCCACCCCTTTCCAACCCGCCCTCCCGCCC 9657		9538 GGGACAAATTCCAAGGCTCCCAGGATTCTAAAGGCCCTCCTGACGGCAGGGCAGGAAAAG 9597	178	9478 CAGGGTGCCAGGGTGGACCAGAGAGGCCTCCTGGGCCCTCCCCTGGATACACTGGGATCT 9537	178	ACCAGCCGTGGGTGGGGCCTGCAGTCGGAGGCCAGCCGTGCCCCACCCCCCGCACGGGCC 9477	178	GACGAGGGAAAAGGGTAAAAGCCACCCACCCAGGCAATCATAAAATTCCTAGGAGCCCACC 9417	178	9298 GCTGCGGATGTCACTGGGCCTCTGGCCAGCTCTGAAAGAATCCCCATGTTTTAAAAATGGT 9357

```
CLONE: GENBANK
US-09-016-434-1100
                                                       밁
                                                                                          ş
                                                                                                                              밁
                                                                                                                                                               Ś
                                                                                                                                                                                               US-10-029-345A-109_COPY_1_302 (1-302) x US-09-016-434-1100 (1-2240)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 11
US-09-016-434-1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ş
                 8
                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1100, App
Patent No. 6500938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 855-0555
TELEPAX: (650) 845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Jenice Au-Young
APPLICANT: Jeffrey J. Sellhamer
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING
TITLE OF INVENTION: PATHAMY GENE EXPRESSION
NUMBER OF SEQUENCES: 1490
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 2240 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTMARE: Word.Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
APPLICATION UNMER: US/09/016,434
PILING DATE: HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                        IMMEDIATE SOURCE:
LIBRARY: GENBA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                     Хо
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                             Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                            STRANDEDNESS:
TOPOLOGY: lir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CITY: PALO ALTO
STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10437 CTGAAG 10442
                                                         291
                                                                                                                                234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              298
                     59
                                                                                            39
                                                                                                                                                                  19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        94304
                                                         GCGGGCTACATCCTAGGTTCGGTCAACGTGCGCTGTAACACCATCGTGCGGCGGCGG---
                                                                                                                              CTGCCGAGCGGC---GGCAAGTGCCTGCTGCTGGACTGCAGACCGTTCCTGGCGCACAGC
GlnGlnAspLysValLeuIleThrGluLeuIle-----
::: | | | | ::: ::::::::
                                                                                                                                                                 LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IleLys 299
                                                                                          ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             E: INCYTE PHARMACEUTICALS, INC 3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                              linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application US/09016434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   single
                                                                                                                                                                                                                                         6.38e-47
426.00
54.85%
33.44%
27.24%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PA-0002 US
                                                                                                                                                                                                                                                         Mismatches:
Indels:
                                                                                                                                                                                                                                                                                             Matches:
Conservative:
                 -GlnHisSerAlaLysHisLys
                                                       347
                                                                                                                              290
                                                                                                                                                                  38
                                                                                                                                                                                                                                    Sequence 10, Application US/09371671B
Patent No. 6548743
GENERAL INFORMATION:
APPLICANT: Sheen, Jen
APPLICANT: Chiu, Wan-Ling
APPLICANT: Chiu, Wan-Ling
TITLE OF INVENTION: TRANSGENIC PLANTS EX
TITLE OF INVENTION: DUAL-SPECIFICITY MA
FILE REFERENCE: 00786/370002
; TYPE: DNA
; ORGANISM: Mus
US-09-371-671B-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                           US-09-371-671B-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                        SOFTWARE: FastSEQ for Windows Version SEQ ID NO 10
                                                                                                                          CURRENT APPLICATION NUMBER: US/09/371,671B CURRENT FILING DATE: 1999-08-10 PRIOR APPLICATION NUMBER: 60/155,934 PRIOR FILING DATE: 1999-01-14 PRIOR APPLICATION NUMBER: 60/095,938 PRIOR FILING DATE: 1998-08-10
                                                                                                             NUMBER OF SEQ ID NOS: 11
                                                       LENGTH: 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1005
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1065 ATCATCTCGCCCAACTTCAGCTTCATGGGACAGCTGCTGCAGTTCGAGTCCCAGGTG 1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180 IleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIle 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGGCC 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGCTGGTGCACTGCCAGGCGGCATCTCGCGGTCGGCCATCTGCCTGGCCTACCTG 1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeu 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGCCCTTGGACCTGGGCTGCAGCTCCTGTGGGACCCCACTACACGACCAGGGGGGGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlnPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGCACCGACATCTGCCTGCTCAAAGGCGGCTATGAGAGGTTTTCCTCCGAGTACCCAGAA 587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ValAspIleAspCysSerGlnLysValValTyrAspGlnSerSerGlnAspValAla 96
;;;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGCCGAGGAGGAGGTACGCGCCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGATGAAGAAACGGGTGAGGCTGGAGGAGGCCTTCGAGTTCGTTAAGCAGCGCCGCAGC 1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGACGCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAAC---CAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGGAGATCCTTCCCTCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTCTGTTCTAAAACCAAGGCCCTGGCAGCCATCCCACCCCCGGTTCCCCCCAGCGCCACA 647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ---AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGly 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCCTCCGCGAGGACAGCACCGTGTCGCTGGTGCAGGCGCTGCGCCGCAACGCCGAG 527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe--- 115
                   musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ------Cys---LeuProValAlaAsnIle---GlyPro 159
                                                                                                                                                                                                                                                           EXPRESSING A MAPK PHOSPHATASE
                                                                                                                                                                                                                                                             AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         707
```

```
S
                                 밁
                                                          δ
                                                                                              片
                                                                                                                         Ś
                                                                                                                                                              밁
                                                                                                                                                                                    ર્ક
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                     Вþ
                                                                                                                                                                                                                                                                                                                                                                                                                                                   $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-029-345A-109_COPY_1_302 (1-302) x US-09-371-671B-10 (1-944)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
   296
                                                               276
                                                                                               810
                                                                                                                              256
                                                                                                                                                              750
                                                                                                                                                                                            236
                                                                                                                                                                                                                                                          216
                                                                                                                                                                                                                                                                                          633
                                                                                                                                                                                                                                                                                                                          196
                                                                                                                                                                                                                                                                                                                                                          573
                                                                                                                                                                                                                                                                                                                                                                                        176
                                                                                                                                                                                                                                                                                                                                                                                                                       513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       399
                                                                                                                                                                                                                                                                                                                                                                                                                                                       158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            113 LysSerPheAsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              219 GGCCGCCTGCTGGCCGGAGCCTACCACGCCGTGGTGCTGCTGGACGAGCGCAGCGCCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            55 LysargargLeuGlnGlnAspLysValLeuIleThrGluLeuIleGlnHisSerAlaLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         15 LeuValAlaLeuLeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPhe ::: ||||||:::||| ||| |||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       35 ValGluTyrAsnThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMet 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          39 CTGCGCGCGCTGCCAGAGGGCGCCGCGCAGTGCCTGTTGTTGGATTGTCGCTCCTTC
                              CAGAGGCGGAGTATCATCTCCCCGAACTTCAGCTTCATGGGCCAGCTGCTGCAGTTTGAG
                                                         GluLysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGlu 295
                                                                                                               IleAlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLys
LysLysIle 298
                                                                                                                                                                                SerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAla 255
                                                                                                                                                                                                                                                                                                                                                       CGGAAGGATATGCTTGACGCCTTGGGCATCACCGCCTTGATCAACGTCTCAGCCAATTGT
                                                                                                                                                                                                                                                                                                                                                                                                                     CAGGGGGGCCCAGTGGAGATCCTGTCCTTCTTGTACCTGGGCAGTGCCTATCACGCTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TICGCTITCAACGCCGGCCACAICGCGGCTCAGIGAACGIGCGCTTCAGCACCAICGIG
                                                                                            CTTGCTTACCTCATGAGGACTAACCGGGTAAAGCTGGACGACGCCTTTGAGTTTGTGAAG
                                                                                                                                                            GCTGGAGGGAGAGTGTTTGTTCATTGCCAGGCCGGCATCTCCCGGTCAGCCACCATCTGC
                                                                                                                                                                                                                          AAGGCAGACATCAGCTCCTGGTTCAACGAGGCTATTGACTTCATAGACTCCATCAAGGAT
                                                                                                                                                                                                                                                       CysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAla
                                                                                                                                                                                                                                                                                          CCTAAC---CACTTTGAGGGTCACTACCAGTACAAGAGCATCCCTGTGGAGGACAACCAC
                                                                                                                                                                                                                                                                                                                     ProLysProAspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPhe
                                                                                                                                                                                                                                                                                                                                                                                  AsnLysGluLeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTAGTGTGCCTGACAGTGCAGAATCCGGATGCAGCTCCTGTAGTACCCCCTCTCTACGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTGAGCTGTGCAGCAAACAGTCCACC-----CCCACGGGGCTCAGCCTCCCCCTGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProGlyLeuCysGluGlyLysSerThrLeuValProThrCysIleSerGlnPro-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCGCGCTCCACTCAAGTCTTCTTCTCCAAGGAGGATATGAAGCGTTTTCGGCTTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ValAlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeu-----Glu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HisLysValAspIleAspCysSerGlnLysValValValTyrAspGlnSerSerGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGGCGCCGCCCAAGGGCCCATGGGCCCTGGAGCATATCGTGCCCCAACGCTGAACTGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                  -----GlyProThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeu 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGACGGCGCCAAGCGCGACGGCACCCTGGCCCTGGCCGCGGGCGCGCTCTGCCGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.95e-47
425.00
50.17%
34.32%
27.17%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ------CysLeuProValAlaAsnIle-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       944
104
48
129
22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              218
                                                                                              869
                                                                                                                                                            809
                                                                                                                                                                                                                          749
                                                                                                                                                                                                                                                                                        689
                                                                                                                                                                                                                                                                                                                        215
                                                                                                                                                                                                                                                                                                                                                                                       195
                                                                                                                                                                                                                                                                                                                                                                                                                       572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
S
                                                                    밁
                                                                                                                          δ
                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                            US-10-029-345A-109_COPY_1_302 (1-302) x US-08-530-290-11 (1-1238)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; MOLECULE TYPE: US-08-530-290-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-08-530-290-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 11, Application Patent No. 5958721
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: (415) 576-0300 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 10-FEB-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 930725
FILING DATE: 07-APR-1993
ATTORNEY/AGENT INFORMATION:
NAME: Bastian, Kevin L.
REGISTRATION NUMBER: 34,774
REGISTRATION NUMBER: 34,774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE CHARACTERISTICS:
LENGTH: 1238 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REFERENCE/DOCKET NUMBER: 08
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/GB94/00694
FILING DATE: 31-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9402573.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Release #1.0,
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/530,290
FILING DATE: 14-DEC-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Marshall, Christopher APPLICANT: Ashworth, Alan APPLICANT: Hughes, David Anthony TITLE OF INVENTION: Methods for the APPLICANT: Therapeutic APPLICANTION: Therapeutic APPLICANTION: Therapeutic APPLICANTION: Therapeutic APPLICANTION: Therapeutic APPLICANTION: Therapeutic APPLICANTION: Therapeutic APPLICANTION: Therapeutic APPLICANTION: Therapeutic APPLICANTION: Therapeutic APPLICANTION: Therapeutic APPLICANTION: Therapeutic APPLICANTIC A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No. :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 94111-3834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11,
11, 59587
                                                             225 GCGGGCTACATCCTAGGTTCGGTCAACGTGCGCTGTAACACCATCGTGCGGCGGCGG---
                                                                                                                                                                                                          168 CTGCCGAGCGGC---GGCAAGTGCCTGCTGCTGCAGACCGTTCCTGGCGCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         930
                                                                                                                                                                                                                                                                               19 LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                                                                                          ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu
GlnGlnAspLysValLeuIleThrGluLeuIle-----GlnHisSerAlaLysHisLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCCAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/08530290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Two Embarcadero
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 single
                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.12e-47
425.00
53.85%
33.11%
27.17%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GB 9307250.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Townsend and Crew LLP
Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    084611-000000US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Screening of Substances for Activity and Yeast for Use
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   #1.30
                                                                                                                                                                                                                                                                                                                                                                                                                 1238
99
62
116
22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Therein
76
                                                                        281
                                                                                                                                     58
                                                                                                                                                                                                          224
```

```
APPLICANT: Mannion, Jane
APPLICANT: Ban, Liqun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C14
CURRENT APPLICATION NUMBER: US/99/702,705
CURRENT FILING DATE: 2000-10-30
NUMBER OF SEQ ID NOS: 1833
SOPTWARE: PASESEQ for Windows Version 3.0
SEQ ID NO 803
                                                                                                                                                                                                                                                                                                RESULT 14
US-09-702-705-803
                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                            중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                     Sequence 803, Application Patent No. 6504010 GENERAL INFORMATION:
                                                                                                                                                  APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                160
                                                                                                                                                                                                                                                                                                                                                                          280
                                                                                                                                                                                                                                                                                                                                                                                                        939
                                                                                                                                                                                                                                                                                                                                                                                                                                    260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  77
                                                                                                                                              Wang, Tongtong
Bangur, Chaitanya s
Lodes, Michael A.
Fanger, Gary
Vedvick, Tom
Carter, Darrick
Retter, Marc
                                                                                                                                                                                                                                                                                                                                                          ThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIle 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGGAGATCCTTCCTCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATG
                                                                                                                                                                                                                                                                                                                                            ATCATCTCGCCCAACTTCAGCTTCATGGGGCAGCTGCTGCAGTTCGAGTCCCAGGTG 1055
                                                                                                                                                                                                                                                                                                                                                                                                       ATGATGAAGAAACGGGTGAGGCTTGGAGGAGGCCTTCGAGTTCGTTAAGCAGCGCCGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                         MetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGCTGCTGCCACTGCCAGGCGGCATCTCGCGGTCGGCCACCATCTGCCTGGCCTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGGACGCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAAC---CAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGCCCTTGGACCTGGACTGCAGCTCCTGTGGGACCCCACTACACGACCAGGAGGGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCTGTTCTAAAACCAAGGCCCTGGCAGCCATCCCACCCCGGTTCCCCCCAGCGCCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGCACCGACATCTGCCTGCTCAAAGGCGGCTATGAGAGGTTTTCCTCCGAGTACCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ---AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ValAspIleAspCysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGCCGAGGAGGAGGAGGTACGCGCCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCCTCCGCGAGGACAGCACCGTGTCGCTGGTGGTGCAGGCGCTGCGCCGCAACGCCGAG
                                                                                                                                                                                                                                                                                  US/09702705
                                                                                                                                                                                                                           ß
                                                                                                       FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----AsnIleGlyPro
                                                                                                         THE THERAPY
                                                                                                          AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    148
                                                                                                                                                                                                                                                                                                                                                                                                        998
                                                                                                                                                                                                                                                                                                                                                                                                                                    279
                                                                                                                                                                                                                                                                                                                                                                                                                                                               938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; LENGTH: 1238
; TYPE: DNA
; ORGANISM: Homo :
US-09-702-705-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                               밁
                                                                       8
                                                                                                       밁
                                                                                                                              Ś
                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                S
                                                                                                                                                                밁
                                                                                                                                                                                          $
                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                               片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-029-345A-109_COPY_1_302 (1-302) x US-09-702-705-803 (1-1238)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                 819
                                                                                                                                                                                                                                                       200
                                                                                                                                                                                                                                                                                                                                            642
                                                                                                                                                                                                                                                                                                                                                                                                       582
                   280
                                                                                                                                                                                              220
                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                          160
                                                                                                                                                                                                                                                                                                                                                                                                                                    149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            39 ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19
ThrileSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIle
                                                                                                                                                                                                                                                                                                                                            GTGGAGATCCTTCCCTTCCTCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATG
                                                                                                                                                                                                                                                                                                                                                            ThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                     GAGCCCTTGGACCTGGAGCTCCTGTGGGACCCCACTACACGACCAGGAGGGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTCTGTTCTAAAACCAAGGCCCTGGCAGCCATCCCACCCCGGTTCCCCCCAGCGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGCCGAGGAGGAGGTACGCGCCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCGGGCTACATCCTAGGTTCGGTCAACGTGCGCTGTAACACCATCGTGCGGCGGCGG---
                                               ATGATGAAGAAACGGGTGAGGCTGGAGGAGGAGCCTTCGAGTTCGTTAAGCAGCGCCGCAGC 998
                                                             MetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro
                                                                                                       GTGCTGGTGCACTGCCAGGCGGGCATCTCGCGGTCGGCCATCTGCCTGGCCTACCTG
                                                                                                                              ValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIle 259
                                                                                                                                                                                                                                                                                                           IleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnPro-----CysLeuProValAla-----AsnIleGlyPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                                                                                                                                 AGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGC
                                                                                                                                                                                          LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCys
                                                                                                                                                                                                                        TTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATC
                                                                                                                                                                                                                                                    PheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIle
                                                                                                                                                                                                                                                                                  CTGGACGCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAAC---CAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuCysGluGlyLysSerThrLeu-------ValProThrCysIleSer 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGCACCGACATCTGCCTGCTCAAAGGCGGCTATGAGAGGTTTTCCTCCGAGTACCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ---AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ValAspIleAspCysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlnGlnAspLysValLeuIleThrGluLeuIle-----GlnHisSerAlaLysHisLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGCCGAGCGGC----GGCAAGTGCCTGCTGCAGACTGCAGACCGTTCCTGGCGCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.12e-47
425.00
53.85%
33.11%
27.17%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            :Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1238
99
62
116
22
                                                                                                                                                                                                                                                                                                                                                                          179
                                                                            279
                                                                                                         938
                                                                                                                                                                 878
                                                                                                                                                                                              239
                                                                                                                                                                                                                                                                                                               199
                                                                                                                                                                                                                                                                                                                                                                                                       641
                                                                                                                                                                                                                                                                                                                                                                                                                                    159
                                                                                                                                                                                                                                                                                                                                                                                                                                                               581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                76
                                                                                                                                                                                                                                                       219
                                                                                                                                                                                                                                                                                  758
                                                                                                                                                                                                                                                                                                                                           701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              281
```

뭉

999

```
NUMBER OF SEQ ID NOS: 1
SOFTWARE: FastSEQ for V
SEQ ID NO 803
LENGTH: 1238
TYPE: DNA
ORGANISM: Homo sapien
US-09-736-457-803
   Ś
                                     밁
                                                                Ś
                                                                                                  밁
                                                                                                                             Ş
                                                                                                                                                                  밁
                                                                                                                                                                                                                                 ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                          S
                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                               뭥
                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                片
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 15
US-09-736-457-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-029-345A-109_COPY_1_302 (1-302) x US-09-736-457-803 (1-1238)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Fan, Liqun
APPLICANT: Wang, Aijun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C1.5
CURRENT APPLICATION NUMBER: US/09/736,457
CURRENT FILING DATE: 2000-12-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                     582
      160
                                                                   149
                                                                                                                                  135
                                                                                                                                                                  462
                                                                                                                                                                                           116 ---AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGly 134
                                                                                                                                                                                                                                  402
                                                                                                                                                                                                                                                                                                 342
                                                                                                                                                                                                                                                                                                                                                          282 GCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGCCGAGGAGGAGGTACGCGCCCGC
                                                                                                522 TTCTGTTCTAAAACCAAGGCCCTGGCAGCCATCCCACCCCGGTTCCCCCCAGCGCCACA 581
                                                                                                                                                                                                                                                                                                                                                                                                                                225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                168
                                                                                                                                                                                                                                                                 97
                                                                                                                                                                                                                                                                                                                          77 ValAspIleAspCysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAla 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                39
                                                                                                                                                                                                                                                                                                                                                                                            59 GlnGlnAspLysValLeuIleThrGluLeuIle-----GlnHisSerAlaLysHisLys 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19 LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    803, Application US/09736457
5. 6509448
                                 GAGCCCTTGGACCTGGACTGCAGCTCCTGTGGGACCCCACTACACGACCAGGAGGGTCCT
                                                                                                                                                               GCACCGACATCTGCCTCAAAAGGCGGCTATGAGAGGTTTTCCTCCGAGTACCCAGAA 521
ThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeu 179
                                                                     GlnPro----
                                                                                                                                                                                                                                                            SerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe--- 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu 58
                                                                                                                              AGCCTCCGCGAGGACAGCACCGTGTCGCTGGTGGTGCAGGCGCTGCGCCGCAACGCCGAG
                                                                                                                                                                                                                                                                                             GCGGGCTACATCCTAGGTTCGGTCAACGTGCGCTGTAACACCATCGTGCGGCGGCGG----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGCCGAGCGGC---GGCAAGTGCCTGCTGCTGCTGCAGACCGTTCCTGGCGCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Carter, Darrick
Retter, Marc
Mannion, Jane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCATCTCGCCCAACTTCAGCTTCATGGGGCAGCTGCTGCAGTTCGAGTCCCAGGTG 1055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Fanger, Gary
Vedvick, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Vedvick,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bangur, Chaitanya
Lodes, Michael A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wang, Tongtong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.12e-47
425.00
53.85%
33.11%
27.17%
                                                                 CysLeuProValAla--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1238
99
62
116
22
                                                                 ------AsnIleGlγPro 159
                                 641
                                                                                                                                                                                                                               461
                                                                                                                                                                                                                                                                                             401
                                                                                                                                                                                                                                                                                                                                                              341
                                                                                                                                                                                                                                                                                                                                                                                                                            281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           38
```

```
Ś
                                                                            밁
                                                                                                         S
                                                                                                                                                          뮍
                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                              939
                                                                                                                                                             879
999
                  280 ThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIle 298
                                                                                                                   260
                                                                                                                                                                                                  240
                                                                                                                                                                                                                                         819
                                                                                                                                                                                                                                                                                                                                                             200
                                                                                                                                                                                                                                                                                                                                                                                                  702
                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            642
                                                                                                                                                                                                                                                                            220 LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCys 239
ATCATCTCGCCCAACTTCAGCTTCATGGGGCAGCTGCTGCAGTTCGAGTCCCAGGTG 1055
                                                                                                           MetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro 279
                                                                                                                                                                                 ValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIle 259
                                                                                                                                                                                                                                                                                                                                                                                                                                   IleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAsp 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGGAGATCCTTCCCTTCACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATG 701
                                                                            ATGATGAAGAAACGGGTGAGGCTGGAGGCGCTTCGAGTTCGTTAAGCAGCGCCGCAGC 998
                                                                                                                                                        GTGCTGGTGCACTGCCAGGCGGCATCTCGCGGTCGGCCACCATCTGCCTGGCCTACCTG 938
                                                                                                                                                                                                                                                                                                                                                                                                CTGGACGCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAAC---CAC 758
                                                                                                                                                                                                                                         AGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGC 878
                                                                                                                                                                                                                                                                                                                                                           PhelleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysile 219
                                                                                                                                                                                                                                                                                                                     TTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATC
                                                                                                                                                                                                                                                                                                                     818
```

Search completed: February 14, 2005, 11:12:22 Job time : 149.355 secs

```
-MODEL-frame+ p2n.model -DEV=xlp
-Q-/cgn2 1/USPTO spool p/US10029345/runat 09022005 091209 25846/app query.fasta_1.1294
-Q-/cgn2 1/USPTO spool p/US10029345/runat 09022005 091209 25846/app query.fasta_1.1294
-DB=PublIshed Applications NA -QFMT=fastap -SUFFIX=p2n.rnpb -MINMATCH=0.1
-LOOPEXT=0 -UNITS=bite -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR SCORE-pct -THR MAX=100
-THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEARSIZE=500 -MINLEN=0
-MAXLEN=200000000 -USER=US10029345 @CGN 1 1 879 @runat 09022005 091209 25846
-NCPU=6 -ICPU=3 -NO MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOF=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Command line parameters:
-MODEL=frame+_p2n.model
                                       February 14, 2005, 10:56:55; Search time 403.187 Seconds (without alignments) 4419.632 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Published_Applications_NA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5378673 seqs, 2950229984 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-029-345A-109_COPY_1_302
1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MAHEMIGTQIVTERLVALLE.....PNFNFLGQLLDYEKKIKNQT 302
/cgn2_6/ptodata/2/pubpna/US07_NEW PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US07_NEW PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US08_NEW PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US09A_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US09B_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US09C_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10A_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10E_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10E_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10F_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10R_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10R_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US10R_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US10R_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US10R_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US10R_PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10757346
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

45	44	43	42	41	40	39	38	37			34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	ហ	4	ω	2	_	Regult No.
602	602	602	634.5	ď	9	724		724	724	837	943	98	•	2	tn ·	1545	· n	ŧπ	ŧπ	tn.	1552	(II	i.n	1552	iл	រោ	1552	(n	LD.	in	in	in	in	1552	iп	in	1552	1552	1552	1552	1552	1552	1552	1552	Score
38.5	8	œ			44.6	46.3	٠	46.3	•			ω	•		8	98.8	9	9	9	9	9	9	•	9	٥	9	9	۰	9	ø	٩	9	Ÿ.	Ö	ø	٠	٠	Ö		٠	Ÿ	٠		99.2	Query
377	346	345	422	_		461	461	461	418	0	4	\$	33	2200	96	10	14	14	14	14	14	14	14	14	14	14	14	14	14	14	79	76	N	ÚΠ	54	ū	3521	4	ú	2732	9	99	99	1998	Length
18	18	18	18	18	18	18	18	18	18	17	17	13	9	17	17	17	18	18	18	18	18	18	18	18	18		18	18	18	18	18	17	17	18	17	9	18	9	17	17	17	18	17	9	BB
-10-357-93	0 - 1123	-10-357-930-2067	-10-357-930-207	-10-357-930-32	-10-357-930-1	US-10-357-930-41346	-10-357-930-41	0-32	-10-357-930-11	-10-072-012-26	-10-220-120-28	S-10-005-858-	-09-964-277-2	-10-072-012	S-10-296-115-	8-10-094-749-673	8-10-357-930-2867	S-10-357-930-2714	-10-357-930-2714	-10-357-930-2692	-10-357-930-2691	-10-357-930-2681	-10-357-930-2	-10-357-930-2282	-10-357-930-2130	-10-357-930-2130	-10-357-930-2108	-357-930-2107	-10-357-930-2096	-10-357-930-2	-10-648-593-11	S-10-343-357-17	-10-425-114-2	-10-377-072-2	-10-377-07	09-816-494-1	8-10-370-715		S-10-257-02	-90	S-10-072-012	-10-377-072-2	77-072-	US-09-816-494-3	ID
	112	2067,	2074,	e 32060,	e 10878,	O	equence 4100	equence 3	equence 11243	equence 265,	equence 28,	ce 1, 1	quence 20,	equenc	equence 520,	equence 673, Ap	e 28675.	equence 27149,	equence 27145,	e 26923	equence 26912	equence 26815	equence 26669	e 2282	equence 2	equence 2130	e 2108	equence 21071,	equence 20969,	e 20824	equence 115,	equence 17, App	equence 26234,	equence 25, App	Sequence 25	quence 1, Appli	Sequence 2	quence 1,	equence 1,	equence 2, Appl	equence	equence 27,	ce 27,	uence 3, App	Description

ALIGNMENTS

찚	RESULT 1
ន	US-09-816-494-3
••	; Sequence 3, Application US/09816494
••	Patent No. US20020034807A1
•	GENERAL INFORMATION:
••	APPLICANT: Meyers, Rachel A.
••	TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY
~-	TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR
••	FILE REFERENCE: 10448-030002
••	CURRENT APPLICATION NUMBER: US/09/816,494
••	CURRENT FILING DATE: 2001-03-23
••	PRIOR APPLICATION NUMBER: US 60/191,858
••	PRIOR FILING DATE: 2000-03-24
••	NUMBER OF SEQ ID NOS: 10
٠.	SOFTWARE: FastSEQ for Windows Version 4.0
٠.	SEQ ID NO 3
••	LENGTH: 1998
••	TYPE: DNA
•	ORGANISM: Homo sapiens
ន	US-09-816-494-3

```
S
                         밁
                                           δ
                                                                        밁
                                                                                            Ş
                                                                                                                    밁
                                                                                                                                             S
                                                                                                                                                                            밁
                                                                                                                                                                                            5
                                                                                                                                                                                                                          닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                            皮
                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-029-345A-109_COPY_1_302 (1-302) x US-09-816-494-3 (1-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               No.:
                                                                                                                                                                                                                             109
 301
                                               281
                                                                         781
                                                                                                 261
                                                                                                                          721
                                                                                                                                                  241
                                                                                                                                                                              661
                                                                                                                                                                                                    221
                                                                                                                                                                                                                                                      201
                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                      181
                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scores:
                                                                                                                                                                                                                                                                                                                                                        161
                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                       141
                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Н
                                      IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                       LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                         LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
 GlnThr
                                                                        CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                           CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                           ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                          IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                            CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                    GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                               CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                             ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                              ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                               ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9.31e-193
1552.00
99.67%
99.34%
99.23%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                004
                                               300
                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                       160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100
                       900
                                                                        840
                                                                                                 280
                                                                                                                         780
                                                                                                                                                  260
                                                                                                                                                                           720
                                                                                                                                                                                                   240
                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                   220
                                                                                                                                                                                                                                                                              009
                                                                                                                                                                                                                                                                                                    200
                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                        140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40
```

```
APPLICANT: CHUN, MIYOUNG
APPLICANT: TSai, FONG-Ying
TITLE OF INVENTION: NOWEL 25869, 25934, 26335, 50365, 2117,
TITLE OF INVENTION: NOWEL 25869, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPIO3-0180MNIM
CURRENT APPLICATION: AND USES THEREFOR
FILE REFERENCE: WINDER: US/10/377,072
CURRENT FILING DATE: 2001-06-29
PRIOR REPLICATION NUMBER: US 60/215,370
PRIOR REPLICATION NUMBER: US 99/895,860
PRIOR RELING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 99/83,806
PRIOR APPLICATION NUMBER: US 99/723,806
PRIOR APPLICATION NUMBER: US 99/723,806
PRIOR APPLICATION NUMBER: US 99/723,806
PRIOR APPLICATION NUMBER: US 99/843,297
PRIOR APPLICATION NUMBER: US 99/843,297
PRIOR APPLICATION NUMBER: US 99/843,297
PRIOR APPLICATION NUMBER: US 99/843,297
PRIOR APPLICATION NUMBER: US 99/843,297
PRIOR APPLICATION NUMBER: US 99/843,297
PRIOR APPLICATION NUMBER: US 99/843,297
PRIOR APPLICATION NUMBER: US 99/843,297
PRIOR APPLICATION NUMBER: US 99/843,297
PRIOR APPLICATION NUMBER: US 99/843,297
PRIOR APPLICATION NUMBER: US 99/843,297
PRIOR PILING DATE: 2000-05-21
PRIOR APPLICATION NUMBER: US 99/861,801
PRIOR APPLICATION NUMBER: US 99/861,801
PRIOR APPLICATION NUMBER: US 99/861,801
PRIOR APPLICATION NUMBER: US 99/861,801
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR APPLICATION NUMBER: US 99/816,494
PRIOR APPLICATION NUMBER: US 09/815,419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 27, Application US/10377072
Publication No. US20040009501A1
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals In
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
APPLICANT: Logan, Thomas Joseph
APPLICANT: Glucksmann, Maria A.
APPLICANT: Meyers, Rachel E.
APPLICANT: Williamson, Mark J.
                                                 맑
                                                                                               δ
                                                                                                                                                                  밁
                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)...(1998)
US-10-377-072-27
                                                                                                                                                                                                                                                                           US-10-029-345A-109_COPY_1_302 (1-302) x US-10-377-072-27 (1-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-377-072-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 1998
TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Remaining Prior Application data removed NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US 09/815,419 PRIOR FILING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
  41
                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FastSEQ for Windows Version 4.0
                                                                                    SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                               MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                  ATGGCCCATGAGATGATTGGAAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rudolph-Owen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sapiens
                                                                                                                                                                                                                                                                                                                                        9.31e-193
1552.00
99.67%
99.34%
99.34%
17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Laura A.
                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          See File Wrapper or PALM.
  60
                                                       120
                                                                                                           40
                                                                                                                                                                  60
                                                                                                                                                                                                                      20
```

ঠ 밁

```
RESULT 3
US-10-377-072-27
; Sequence 27, Application US/10377072
; Publication No. US20040157221A9
; Publication No. US20040157221A9
; Publication No. US20040157221A9
; Publication No. US20040157221A9
; Papelicant: Curris, Rory A.J.
; APPLICANT: Logan, Thomas Joseph
; APPLICANT: Logan, Thomas Joseph
; APPLICANT: Meyers, Rachel E.
; APPLICANT: Meyers, Rachel E.
; APPLICANT: Williamson, Mark J.
; APPLICANT: Rudolph-Owen, Laura A.
APPLICANT: Chun, Miyoung
; APPLICANT: Tsa1, Fong-Ying
; APPLICANT: Tsa1, Fong-Ying
; APPLICANT: Tsa1, Fong-Ying
; TITLE OF INVENTION: AND USES THEREFOR
; FILE REFERENCE: MPI03-0180MNIM
                                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                              281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGACT
                                                                                                                                                                                                                                                                                                                                                                                        GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                          ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspCysPheLeuThrValLeuGeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      906
                                       AND 49933 MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100
                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: DNA; ORGANISM: Homo Sa; FEATURE: ; FEATURE: ; NAME/KEY: CDS; LOCATION: (1)...(US-10-377-072-27
                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
                              밁
                                                                                                                밁
                                                                                                                                              Ś
                                                                                                                                                                                    밁
                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR PPLICATION NUMBER: US 60/215,370
PRIOR PRILING DATE: 2000-06-29
PRIOR PPLICATION NUMBER: US 60/187,455
PRIOR PILING DATE: 2000-11-28
PRIOR PILING DATE: 2000-01-28
PRIOR PILING DATE: 2000-03-07
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR PILING DATE: 2001-04-25
PRIOR PILING DATE: 2001-04-25
PRIOR PILING DATE: 2001-04-26
PRIOR PILING DATE: 2001-05-21
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR PILING DATE: 2001-05-21
PRIOR PILING DATE: 2001-05-21
PRIOR PILING DATE: 2001-05-19
PRIOR PILING DATE: 2001-03-22
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR PILING DATE: 2001-03-22
PRIOR PILING DATE: 2001-03-22
PRIOR PILING DATE: 2001-03-22
PRIOR PILING DATE: 2001-03-22
PRIOR PILING DATE: 2001-03-22
PRIOR FILING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-029-345A-109_COPY_1_302 (1-302) x US-10-377-072-27 (1-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: FO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Remaining Prior Application NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH: 1998
                                       361
                                                                          121
                                                                                                                301
                                                                                                                                                  101
                                                                                                                                                                                    241
                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                  121
     141
                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Н
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FastSEQ for Windows Version
                                                                                                                                                                                    HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                              SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                          LeuAlaGlyGlyPheAlaGluPheSerArgCyBPheProGlyLeuCyBGluGlyLyBSer
                                                                                                                                                                                                                                                          GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                   AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
   ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160
                                                                                                                GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                   AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                  CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                       CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                           AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           (1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9.31e-193
1552.00
99.67%
99.34%
99.23%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            data removed -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          See File Wrapper or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0011
```

밁 Ś 밁 ð В S 밁 5 밁 ঠ 밁 S 밁 ક 밁 ક 밁 ঠ 밁 გ 밁 ક 밁 S

140

420

120

300

360

100

240 90 180 60 120 40

```
"Illiam M.

"LICANT: Lepley, Denise M.

"LICANT: Rieger, Daniel K.

APPLICANT: Burgess, Catherine E.

TITLE OF INVENTION: Proceins and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-258

CURRENT APPLICATION NUMBER: US/10/072,012

CURRENT APPLICATION NUMBER: 60/265,102

PRIOR APPLICATION NUMBER: 60/265,102

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: 2001-01-30

PRIOR APPLICATION NUMBER: 67

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: 2001-01-30

PRIOR PILING DATE: 2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 4
US-10-072-012-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 257, Application US/10072012 Publication No. US20040033493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                       Gangolli, Esha
Padigaru, Muralidhara
Anderson, David W.
Rastelli, Luca
Miller, Charles E.
Gerlach, Valerie
Taupier Jr, Raymond J.
Gueev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tchernev, Velizar
Spytek, Kimberly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LysärgMetäspMetSerLeuäspGluälaTyrärgPheValLysGluLysärgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCygProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patturajan, Meera
Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patturajan,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Zerhusen, Bryan
                                                                                                                                                              Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                              밁
                                                        5
                                                                                        밁
                                                                                                                     Ş
                                                                                                                                                         В
                                                                                                                                                                                  Ş
                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-072-012-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; SOFTWARE: PatentI
; SEQ ID NO 257
; LENGTH: 2071
; TYPE: DNA
; ORGANISM: Homo 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR PILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR FILING DATE: 2001-02-05
PRIOR PILING DATE: 2001-02-05
PRIOR PILING DATE: 2001-02-05
PRIOR PILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR PILING DATE: 2001-02-08
PRIOR PILING DATE: 2001-02-08
PRIOR FILING DATE: 2001-02-08
PRIOR FILING DATE: 2001-02-08
PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Remaining Prior Application data removed NUMBER OF SEQ ID NOS: 1391
                              601
                                                                                                                                                            481
                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                        361
                                                           181
                                                                                                                          161
                                                                                                                                                                                         141
                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PatentIn Ver.
                                             GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                        ArgileLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                            LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                         AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                  ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                          CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                          AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                              CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                          ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                       CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                      GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                         GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9.89e-193
1552.00
1552.00
99.67%
99.34%
99.34%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   x US-10-072-012-257 (1-2071)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              - See File Wrapper or PALM.
```

837

777

```
RESULT 5
US-10-168-506-2
Sequence 2, Application US/10168506
Publication No. US20040053229A1
GENERAL INFORMATION:
APPLICANT: PLOWMAN, GREGORY D.
APPLICANT: MARTINEZ, RICARDO
APPLICANT: MANVING, GERARD
APPLICANT: MANVING, GERARD
APPLICANT: SUDARSANAM, SUCHA
APPLICANT: SUDARSANAM, SUCHA
APPLICANT: HILL, RON
APPLICANT: FIRMING
                       밁
                                                     ঠ
                                                                                    문
                                                                                                         ঠ
                                                                                                                                           문
                                                                                                                                                                    ફ
                                                                                                                                                                                               US-10-029-345A-109_COPY_1_302 (1-302) x US-10-168-506-2 (1-2732)
                                                                                                                                                                                                                               Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     श्च
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         হ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                US-10-168-506-2
                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: PLANÁGAN, PETER
TITLE OF INVENTION: MAMALIAN PROTEIN PHOSPHATASES
FILE REPERENCE: 03602/1351
CURRENT APPLICATION NUMBER: US/10/168,506
CURRENT APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR FILING DATE: 2000-12-21
NUMBER OF SEQ ID NOS: 76
                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 2

LENGTH: 2732
                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                     No.:
                                                                                                                                            538
                                                                                       865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                             859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           201
  61
                                                        41
                                                                                                                21
                                                                                                                                                                       ۳
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGACT 966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlnThr 302
                                                                                                                                            ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                             MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LysArqMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                             HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                      SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                             CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                       AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                               1.57e-192
1552.00
199.67%
99.34%
99.34%
17
                                                                                                                                                                                                                                             Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                      Length:
Matches:
                                                                                                                                                                                                                              Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 280
  80
                             717
                                                        60
                                                                                       657
                                                                                                                  40
                                                                                                                                            597
                                                                                                                                                                       20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           220
                                                                                Sequence 1, Application US/10257026

Publication No. US20040086859A1

GENERAL INFORMATION:
APPLICANT: Merck Patent GmbH
TITLE OF INVENTION: New dual specificity phosphatase
FILE REFERENCE: DUSP10KDWS
CURRENT APPLICATION NUMBER: US/10/257,026

CURRENT FILING DATE: 2003-11-07

NUMBER OF SEQ ID NOS: 3

SOFTWARE: Patentin Ver. 2.1

SEQ ID NO 1
LENGTH: 3059
TYPE: DNA
RGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
Alignment Scores:
                             US-10-257-026-1
                                                                                                                                                                                                                                                                                        US-10-257-026-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            片
                                      FEATURE:
NAME/KEY: CDS
LOCATION: (127)..(2121)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1018
                                                                                                                                                                                                                                                                                                                                                                                          1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1258
                                                                                                                                                                                                                                                                                                                                 1438 CAGACT 1443
                                                                                                                                                                                                                                                                                                                                                                                                                    281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301 GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnGlnAsnGly1leGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                          IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                        ATATCTCCAAACTTCAATTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                          1437
                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               897
```

1377

260

240

220

```
경 음 성
  밁
                S
                                 밁
                                               δ
                                                                   吊
                                                                                                                                   음 성 음
                                                                                                                                                                                      8 B 8
                                                                                                                                                                                                                                       닭
                                                                                                                                                                                                                                                        청 유
                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         皮
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      No.:
                                                                     907
                                                                                                       847
                                                                                                                      241
                                                                                     261
                                                                                                                                        787
                                                                                                                                                                         727
                                                                                                                                                                                                            667
                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                              607
                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                               547
                                                                                                                                                        221
                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                               141
                                                                                                                                                                                                                                                                                                                 487
                                                                                                                                                                                                                                                                                                                                                  427
                                                                                                                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                                                                    367
                                                                                                                                                                                                                                                                                                                                                                                                                     307
                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                        247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          127
                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ы
                                                                  LysärgMetäspMetSerLeuäspGluälaTyrärgPheValLysGluLysärgProThr
                                                                                                    LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
  CAGACT
                                           IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                        GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysDroLysDroAspDhe
                                                                                                                                                                                                                                                                                                              LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                   GlnThr 302
                                                                                                                                      CGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                               ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                 ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                              ACTOTAGTOCOTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                       ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                               HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCCCATGAGATGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
  1032
                                                                                                                                                                                                                                           rteceaatettatetiggetgeeagegagargtetaaeaaggagetgatg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.9e-192
1552.00
99.67%
99.34%
99.23%
17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         x US-10-257-026-1 (1-3059)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3059
300
1
1
0
                                                  300
                                   1026
                                                                    966
                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                     906
                                                                                                                      260
                                                                                                                                       846
                                                                                                                                                                         786
                                                                                                                                                                                                          726
                                                                                                                                                                                                                          200
                                                                                                                                                                                                                                            666
                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                              909
                                                                                                                                                                                                                                                                                               160
                                                                                                                                                                                                                                                                                                                               140
                                                                                                                                                                                                                                                                                                                                                 486
                                                                                                                                                                                                                                                                                                                                                                                   426
                                                                                                                                                                                                                                                                                                                                                                                                  100
                                                                                                                                                                                                                                                                                                                                                                                                                    366
                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1, Application US/09964277

| Patent No. US2020137170A1
| GENERAL INFORMATION: GENERAL INFORMATION: Huche, Ralf M.
| APPLICANT: Luche, Ralf M.
| APPLICANT: Wei, Bo
| TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY
| FILE REFERENCE: 200125.434
| CURRENT APPLICATION NUMBER: US/09/964,277
| CURRENT APPLICATION NUMBER: US/09/964,277
| CURRENT FILING DATE: 2001-09-25
| NUMBER OF SEQ ID NOS: 22
| SOFTWARE: FastSEQ for Windows Version 4.0
| SEQ ID NO 1
| LENGTH: 3496
| TYPE: DNA
| ORGANISM: Homo sapiens
| US-09-964-277-1
           Ś
밁
                           뮍
                                             $
                                                             뭐
                                                                              Ś
                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                δ
                                                                                                                                    밁
                                                                                                                                                δ
                                                                                                                                                                       밁
                                                                                                                                                                                   Ş
                                                                                                                                                                                                        В
                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                                                                    Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 7
US-09-964-277-1
                                                                   1042
                                                 181
                                                                                    161
                                                                                                                     141
                                                                                                                                       922
                                                                                                                                                                         862
                                                                                                                                                      121
                                                                                                                                                                                         101
                                                                                                                                                                                                          802
                                                                                                                                                                                                                                           742
                                                                                                                                                                                                                                                                              682
                                                                                                                                                                                                                                                                                                                                                 562
                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                               LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
         IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                               CAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                           ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                           GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                    AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                 2.38e-192
1552.00
99.67%
99.34%
99.23%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DUAL-SPECIFICITY
                                                                                                                                                                                                                                                                                                                                                                                 x US-09-964-277-1 (1-3496)
                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PHOSPHATASE
```

741

40

681

1221

220

1101

180

200

1041

```
APPLICANT: BRISDELL, HUNTE
APPLICANT: SCHOENFELD, JILL R.
APPLICANT: SCHOENFELD, JILL R.
APPLICANT: WILLIAMS, P. MICKEY
APPLICANT: WILLIAMS, P. MICKEY
APPLICANT: WOOD, WILLIAM I.
APPLICANT: WU, THOMAS D.
TITLE OF INVENTION: Compositions and Methods for the Treatment of Immune
TITLE OF INVENTION: Related Diseases
FILE REFERENCE: P1948R1-US
CURRENT APPLICATION NUMBER: US/10/370,715B
CURRENT FILING DATE: 2003-02-21
NUMBER OF SEQ ID NOS: 742
SEQ ID NO 261
LENGTH: 3521
TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 261, Application US/10370715B
Publication No. US20040258678A1
GENERAL INFORMATION:
PAtin Docket Preview
APPLICANT: BODARY SARAH C.
APPLICANT: BENDELL, HUNTE
APPLICANT: STRIBELL, HUNTE
APPLICANT: SCHORMFELD, JALET
APPLICANT: WILLIAMS, P. MICKEY
APPLICANT: WILLIAMS, P. MICKEY
APPLICANT: WILLIAMS, D.
APPLICANT: WU, THOMAS D.
                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
                 밁
                                             ঠ
                                                                              밁
                                                                                              र्
                                                                                                                              밁
                                                                                                                                                     Ś
                                                                                                                                                                                  밁
                                                                                                                                                                                                       ई
                                                                                                                                                                                                                                 US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 8
US-10-370-715B-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                 Хо.
:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1222
                                                                                                                               624 AGTGGAACGGAAAAAGTGCTACTACTTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                        744
                                                                              684
                                                                                                                                                                                   564 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 281
81
                                                 61
                                                                                                      41
                                                                                                                                                        21
                                                                                                                                                                                                 1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100
                                       AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                            CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                           HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                               SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                          GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGACT 1467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATATETECAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                              2.41e-192
1552.00
99.67%
99.34%
99.23%
                                                                                                                                                                                                                                    x US-10-370-715B-261 (1-3521)
                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                              3521
300
1
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        260
                        803
                                                  80
                                                                              743
                                                                                                      60
                                                                                                                               683
                                                                                                                                                                                   623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                               RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
```

```
Sequence 1, Application US/09816494

Patent No. US20020034807A1

GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
ITILE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY
ITILE OF INVENTION: 98692 AND 21117, NOVEL DUAL SPECIFICITY
ITILE OF INVENTION: 9HOSPHATASE MOLECULES AND USES THEREFOR
ILLE REFERENCE: 10448-030002
CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PRACESCO for Windows Version 4.0
SEQ ID NO 1
LENGTH: 3544
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (589)...(2583)
Alignment Scores: Pred. No.:
                                                            US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1464 CAGACT 1469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301 GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 864 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuAlaGlyGlyPheAlaGluPheSerArgCyBPheProGlyLeuCy8GluGlyLyBSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTAGTGCACTGTTTAGCTGGGATCTCCCCGCTCCGCCACCATCGCCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
    2.43e-192
  Length:
    3544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 923
```

```
Score:
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                   δ
                                                              В
                                                                               Ś
                                                                                                          밁
                                                                                                                      S
                                                                                                                                              뫄
                                                                                                                                                                     정 유
                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                     Ş
RESULT 10
                                                                                                                                                                                                                                                                              DЬ
                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                           1369
                                                                1429
                                                                                                                                                      1309
                                                                                                                                                                                                                                            1189
                                                                                                                                                                                                                                                                                       1129
                                                                                                                                                                                                1249
                                                                                                                                                                                                                                                                                                                                  1069
                                                                                                                                                                                                                                                                                                                                                                             1009
                                        301
                                                                                                                                261
                                                                                                                                                                                                                     221
                                                                                                                                                                                                                                                                 201
                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                       161
                                                                                                                                                                                                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                                                                                                                                                                        949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              829
                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    21
                                        GlnThr 302
                                                                                                                      LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr 280
                                                                                                                                                                LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260
                                                                                                                                                                                                                                                                                                 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300
                                                                                                                                                                                               CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                            ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAspGlyCysVal
                                                                                                                                                                                                                                            ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                        IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                      CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                               ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                         ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                      CTTGCAGGTGTGTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerGlyThrGluLysValLeuIeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1552.00
99.67%
99.34%
99.23%
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    x US-09-816-494-1 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
1
0
                                                                                                                                                                                               1308
                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                      1188
                                                                                                                                                                                                                                                                                                                                 1128
                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                             1068
                                                                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                       1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                           1248
                                                                                                                                                                                                                                                                220
                                                                                                                                                                                                                                                                                                           200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40
```

```
Ś
                                                                           맑
                                                                                                             Ś
                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
吊
                                                                                                                                                           밁
                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                      ; LOCATION: (589)...
US-10-377-072-25
                                                                                                                                                                                                                                    US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR PILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR FILING DATE: 2000-01-28
PRIOR PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR FILING DATE: 2000-03-07
PRIOR PILING DATE: 2001-04-25
PRIOR PILING DATE: 2001-04-25
PRIOR PILING DATE: 2001-04-26
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR PILING DATE: 2001-05-21
PRIOR PILING DATE: 2001-05-21
PRIOR APPLICATION NUMBER: US 69/816,494
PRIOR PILING DATE: 2001-03-22
PRIOR PILING DATE: 2001-03-22
PRIOR PILING DATE: 2001-03-22
PRIOR PILING DATE: 2001-03-22
PRIOR PILING DATE: 2001-03-22
PRIOR PILING DATE: 2001-03-22
PRIOR PILING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: FO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals
APPLICANT: Curtis, Rory A.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 25, Application US/10377072 Publication No. US20040009501A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Remaining
NUMBER OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Homo
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Chun, Miyoung
APPLICANT: Tsai, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPI03-0180MNIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: CDS
LOCATION: (58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH:
                                                                                                                                                             589
                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3544
                                                                                                                                                                                                   1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Prior Application SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Curtis, Rory A.J.
Logan, Thomas Joseph
Glucksmann, Maria A.
Meyers, Rachel E.
Williamson, Mark J.
                             HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                           CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rudolph-Owen, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (2586)
                                                                                                                                                                                                                                                                                   2.43e-192
1552.00
99.67%
99.34%
99.23%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 data removed
                                                                                                                                                                                                                                         x US-10-377-072-25 (1-3544)
                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                   Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 See File Wrapper
                                                                                                                                                                                                                                                                                     0011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   or
r
                                                                           708
                                                                                                                   40
                                                                                                                                                           648
```

ई

밁

밁

```
Sequence 25, Application US/10377072

| Sequence 25, Application US/10377072
| Publication No. US20040157221A9
| GENERAL INFORMATION:
| APPLICANT: Millennium Pharmaceuticals Inc.
| APPLICANT: Curtis, Rory A.J.
| APPLICANT: Logan, Thomas Joseph
| APPLICANT: Logan, Thomas Joseph
| APPLICANT: Meyers, Rachel E.
| APPLICANT: Meyers, Rachel E.
| APPLICANT: Williamson, Mark J.
| APPLICANT: Williamson, Mark J.
| APPLICANT: Rudolph-Owen, Laura A.
| APPLICANT: Teal, Fong-Ying
| TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 2117,
| TITLE OF INVENTION: NOVEL 25869, 16816, 16839, 49937, 49931 AND
| TITLE OF INVENTION: AND USES THEREFOR
| FILE REFERENCE: MPIO3-0180MNIM
| CURRENT APPLICATION NUMBER: US/10/377,072
| CURRENT FILING DATE: 2003-02-27
| PRIOR APPLICATION NUMBER: US 09/895,860
                                                                                                                                                                                                                                                                                                                                               RESULT 11
US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                        1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1009
                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProTrpLeuAspLysSerValAspPheileGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                 AND 49933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                100
                                                                                                 MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: DNA; ORGANISM: Homo Sapie; PEATURE: ; PEATURE: ; NAME/KEY: CDS; LOCATION: (589)...(205-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
                                                     S
                                                                                               밁
                                                                                                                         S
                                                                                                                                                            문
                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,494
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Fast
SEQ ID NO 25
LENGTH: 3544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 114
                           1009
                                                            141
                                                                                               949
                                                                                                                                  121
                                                                                                                                                                     688
                                                                                                                                                                                                      101
                                                                                                                                                                                                                                         829
                                                                                                                                                                                                                                                                                                                                                                                                                                                        649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              589
                                                                                                                                                                                                                                                                                                               769
                                                                                                                                                                                                                                                                                                                                                                                   709
                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                               13
                                                                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FastSEQ for Windows Version 4.0
                                                                                               LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                            HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                              ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsmIleGlyProThr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                     GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                      AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                               CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                   CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                         Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2.43e-192
1552.00
99.67%
99.34%
99.23%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                x US-10-377-072-25 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0011
```

밁 ঠ 문

1068

1008 140 120 888 100 828

948

60

90

40 648

708

ð 유

8 밁 중 유

ঠ В 8 밁 र् 밁 S 밁 ঠ 닭 ঠ 밁 ð

```
APPLICANT: Liu, Jingdong
APPLICANT: Liu, Jingdong
APPLICANT: Zhou, Yihua
APPLICANT: Kovalic, David K.
APPLICANT: Screen, Steven E
APPLICANT: Screen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(5313)B
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 26234
LENGTH: 3625
TYPE: DNA
TOTANITCH: Unan assisse
                       S
                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                         밁
                                                                                      S
                                                                                                                      US-10-029-345A-109_COPY_1_302 (1-302) x US-10-425-114-26234 (1-3625)
                                                                                                                                                             Query Match:
DB:
                                                                                                                                                                                                                                                                                             ; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Clone ID: LIB4119-028-H6_FLI
US-10-425-114-26234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 12
US-10-425-114-26234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 26234, Application US/10425114 Publication No. US20040034888A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                  No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            161
                         21
 SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40
                                                       ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                           MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysargMetAspMetSerLeuaspGluAlaTyrargPheValLysGluLysargProThr 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGACT 1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                            2.53e-192
1552.00
99.67%
99.34%
99.34%
17
                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                       751
                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
RESULT 13

US-10-343-357-17

Sequence 17, Application US/10343357

Publication No. US20040058341A1

GENERAL INFORMATION:
APPLICANT: INCYTE GENOMICS, INC.; TANG, Y.Tom
APPLICANT: ELLIOTT, Vicki S.; RAMKUWAR, Jayalaxmi
APPLICANT: YAO, Monique G.; BURFORD, Neil
APPLICANT: WANG, Yumei E.; STEMART, Elizabeth A.
APPLICANT: GANUHI, Ameena R.; ARVIZU, Chandra S.
APPLICANT: LEE, Ernestine A.; HAFALIA, April J.A.
APPLICANT: LU, Dyung Aina M.; TRIBOULEY, Catherine M.
APPLICANT: GRIFFIN, Jennifer A.; BAUGHN, Mariah R.
APPLICANT: YUE, Henry; WARREN, Bridget A.
APPLICANT: NGUYEN, Danniel B.; CHAWLA, Narinder K.
                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                              당
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                    1532
                                                                                                                                                                                                                                                                                                                                                                                                                       1472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1052
                                                                                                                                                                                                                                                                                  1592
                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                     281
                                                                                                                                                                                                                                                                                                                                                                                                                                                         261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                         GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                         LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200
                                                                                                                                                                                                                                                                                  CAGACT 1597
                                                                                                                                                                                                                                                                                                                                                  ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                    IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                        CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGCAGAATGGGATTGGTTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC 1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 105:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCCGGCCATTTGTGGAATACAATACATCC
```

1351

1291

1471

1591

1531

1171

991

80 871 60

APPLICANT: KEARNEY, Liam
TITLE OF INVENTION: PROTEIN PHOSPHATASES
FILE REFERENCE: PI-0173 PCT

CURRENT APPLICATION NUMBER: US/10/343,357
CURRENT FILING DATE: 2003-01-28

```
LENGTH: 3766
; TYPE: DNA
; ORGANISM: Homo sapiens
; PEATURE:
; NAME/KEY: misc feature
; OTHER INFORMATION: Incyt
US-10-343-357-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ફ
                                                                  5
                                                                                                            밁
                                                                                                                                    হ
                                                                                                                                                                       밁
                                                                                                                                                                                                                र्
                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                        ક
                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                            ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT FILING DATE: 2003-01-28
PRIOR APPLICATION NUMBER: PCT/US01/23716
PRIOR PRILING DATE: 2001-07-26
PRIOR PPLICATION NUMBER: US 60/221,679
PRIOR PPLICATION NUMBER: US 60/223,272
PRIOR PPLICATION NUMBER: US 60/223,272
PRIOR PILING DATE: 2000-08-03
PRIOR PILING DATE: 2000-08-10
PRIOR PILING DATE: 2000-08-10
PRIOR PILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR PILING DATE: 2000-08-18
PRIOR PILING DATE: 2000-08-18
PRIOR PILING DATE: 2000-08-18
PRIOR APPLICATION NUMBER: US 60/229,254
PRIOR APPLICATION NUMBER: US 60/231,366
PRIOR APPLICATION NUMBER: US 60/231,366
PRIOR PILING DATE: 2000-08-08
PRIOR PILING DATE: 2000-08-08
PRIOR PILING DATE: 2000-08-08
PRIOR PILING DATE: 2000-08-08
PRIOR PILING DATE: 2000-08-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOPTWARE: PERL Program 
EQ ID NO 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 20
                                                                                                                                                                                      838
                                                                                                                                                                                                                                                                                                                                                                                                                  859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          865
                                                                                                                                                   121
                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                              778
                                                                                                                                                                                                                                                                                                                                        718
 161
                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                           13
                                                                                                                                                                                                                                                                                                                                                                                                                                    41 HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       μ
ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                    GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                      GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                  LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140
                                                                                                                                                                                                            AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120
                                                                                                                                                                                                                                                                                        CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                  AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                          ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Incyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2.69e-192
1552.00
99.67%
99.34%
99.23%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US20040058341A1 7480570CB1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          x US-10-343-357-17 (1-3766)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3766
                                   1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             40
                                                                                                              957
                                                                                                                                                                                    897
                                                                                                                                                                                                                                                              837
                                                                                                                                                                                                                                                                                                 100
                                                                                                                                                                                                                                                                                                                                        777
                                                                                                                                                                                                                                                                                                                                                                           80
                                                                                                                                                                                                                                                                                                                                                                                                              717
                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     20
```

```
밁
                                                                                 S
                                                                                                                          밁
                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                         US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                               Query Match:
                                                                                                                                                                                                                                                               Best Local Similarity:
                                                                                                                                                                                                                                                                                 Percent Similarity:
                                                                                                                                                                                                                                                                                                                    Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: DNA
; ORGANISM: Homo
US-10-648-593-115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 14
US-10-648-593-115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
APPLICANT: Bristol-Myers Squibb Company
APPLICANT: Bristol-Myers Squibb Company
TITLE OF INVENTION: IDENTIFICATION OF GENES FOR PREDICTING ACTIVITY OF COMPOUNDS THAT
TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR
TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS
FILE REFERENCE: D0273 MP
CURRENT APPLICATION NUMBER: US/10/648,593
CURRENT FILING DATE: 2003-08-26
PRIOR APPLICATION NUMBER: 60/406,385
PRIOR APPLICATION NUMBER: 60/406,385
PRIOR FILING DATE: 2002-08-27
NUMBER OF SEQ ID NOS: 557
RUMBER OF SEQ ID NOS: 557
NUMBER OF SEQ ID NOS: 557
                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn version 3.2 SEQ ID NO 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 115, Application US/10648593 Publication No. US20040106132A1
                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 4790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1078
                                                         244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                      184 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
41 HisileLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                            μ
                                                      SerGlyThrGluLy8ValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGACT 1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                             4.03e-192
1552.00
99.67%
99.34%
99.23%
                                                                                                                                                                                           x US-10-648-593-115
                                                                                                                                                                                                                           Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
                                                                                                                                                                                                                                 001
                                                                                        40
                                                                                                                          243
                                                       303
                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1257
```

밁 Ś 뭕

밁 S

```
APPLICANT: Schlegel. Robert

APPLICANT: Endege, Wilson

APPLICANT: Endege, Wilson

APPLICANT: MONAHAN, John

TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR

TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THEI

TITLE OF INVENTION: HUMAN PROSTATE CANCER

FILE REFERENCE: MRI-007BCN

CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT APPLICATION NUMBER: 09/785,276

PRIOR APPLICATION NUMBER: 09/785,276

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,819

PRIOR APPLICATION NUMBER: 60/183,862
                                                                                                                                                                                                                                                                                                                                                                                RESULT 15
US-10-357-930-20824
; Sequence 20824, Application US/10357930
; Publication No. US20040259086A1
                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGACT 1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAGGGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                          THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILING DATE: 2000-12-13
PRIOR FILING DATE: 2000-12-13
PRIOR FILING DATE: 2000-13-13
PRIOR PILING DATE
                                      S
                                                                                       吊
                                                                                                                                S
                                                                                                                                                                                    문
                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-357-930-20824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-029-345A-109_COPY_1_302 (1-302) x US-10-357-930-20824 (1-5145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc feature LOCATION: 1, 5144, 5145 OTHER INFORMATION: n =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FEATURE:
                                                                                          1129
                                                                                                                                                                                         1069
                                                                                                                                                                                                                                                                                         1009
                                                                                                                                                                                                                                        161
                                                                                                                                                                                                                                                                                                                                       141
                                                                                                                                                                                                                                                                                                                                                                                           949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             689
                                         201
                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           \vdash
                                                                                                                    GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
            IleProGluSerHisPheLeuArgValProValAsnAspSerFheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                               LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerGlyThrGluLysValLeuLeuLleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                          CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                         CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                        ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                         ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                     ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                           CTTGCAGG:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                        GGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.54e-192
1552.00
99.67%
99.34%
99.33%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A,T,C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
```

밁 Ş

140

948 120 100

888

80

768 60 708

828

40 648 20

1008

160

1188

220

1128

1068

음 성

문 S 뮻 S 밁 S 밁 S 밁 Ś 망 Ş 밁 Ś 밁 Ş 밁 Ś

Search o Job time	Db	Ş	Db	Ş	망	ş	дb	ş	9	ş	용
Search completed: February 14, 2005, 14:04:29 Job time : 420.187 secs	1489 CAGACT 1494	301 GlnThr 302	1429 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 1488	281 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300	1369 AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	261 LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr 280	1309 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG 1368	241 LeuValHiBCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260	1249 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTT 1308	221 ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal 240	1189 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 1248

(oldsn) wind asmy even

```
Sequence 2, Application US/09816494

Patent No. 6664089

Patent No. 6664089

Patent No. 6664089

Patent No. 6664089

Patent No. 6664089

Patent No. 6664089

Patent No. 6664089

Patent No. 6664089

PATELICANT: Neverious 38692 AND 21117, NOVEL DUAL SPECIFICITY

PITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR

PILE REFERENCE: 10448-030002

CURRENT APPLICATION NUMBER: US/09/816,494

CURRENT FILING DATE: 2001-03-23

PRIOR APPLICATION NUMBER: US 60/191,858

PRIOR APPLICATION NUMBER: US 60/191,858

PRIOR FILING DATE: 2000-03-24

INVMBER OF SEQ ID NOS: 10

SOPTMARE: PASTSEQ for Windows Version 4.0

SEQ ID NO 2

LENGTH: 665

TYPE: PRT

ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum
Maximum
        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                         RESULT 1
US-09-816-494-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Listing first 1000 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Total number of hits satisfying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Word size :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OLIGO
Gapop 60.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-029-345A-109
665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 513545 ведв,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          February
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                71.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Issued_Patents AA:*

1: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAHEMIGTQIVTERLVALLE.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2005, 12:12:08; Search time 45 Seconds (without alignments)
1103.147 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gapext 60.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 chosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        딩
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-816-494-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 2, Appli
```

```
밁
                                                                            Ş
                                                                                                          밁
                                                                                                                                        Ş
                                                                                                                                                                            밁
                                                                                                                                                                                                 S
                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Simi
Matches 472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local Similarity 100.0%; hes 472; Conservative (
 614
                           614
                                                                                                                    494
                                                                                                                                                  494
                                                                                                                                                                             434
                                                                                                                                                                                                         434
                                                                                                                                                                                                                                      374
                                                                                                                                                                                                                                                                    374
                                                                                                                                                                                                                                                                                                 314
                                                                                                                                                                                                                                                                                                                   314 LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVQPSVLLED 373
                                                                                                                                                                                                                                                                                                                                                                                                                    194 TCPKPDPIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT 253
                                                                                                                                                                                                                                                                                                                                                           254
                                                                                                                                                                                                                                                                                                                                                                        254 IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                  HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS 665
                                                                                                                                                                                                                                                    SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                            TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                          TILDGINKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                           TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                     SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                        TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                   TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                    TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                 LHLEKPNEPVPAVSEGGOKSETPLSPPCADSATSEAAGORPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                          IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            71.0%; Score 472; DE 100.0%; Pred. No. 0; Live 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                      613
                                                                                                                                                                                                                                                                    433
                                                            613
                                                                                                                    553
                                                                                                                                                  553
                                                                                                                                                                             493
                                                                                                                                                                                                         493
                                                                                                                                                                                                                                      433
                                                                                                                                                                                                                                                                                                                                                           313
                                                                                                                                                                                                                                                                                                 373
```

Search completed: February 9, 2005, 12:29:30 Job time : 45 secs

inis Page Biank (uspto)

```
RESULT 1
US-09-816-494-3
(Sequence 3, Application US/09816494
February No. 6664089
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Minimum
Maximum
                                                                                                                                                                                                                                                                  Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -MODEL=frame+p2n.model -DBV=xlp
-Q=/cgp1/USPTO.gpool_p/US10029345/runat 09022005_091322_26420/app_query.fasta_1.839
-Q=/cgp1/USPTO.gpool_p/US10029345/runat 09022005_091322_26420/app_query.fasta_1.839
-DB=Issued_patents_NA_CFMT=fastap_-SUFFIX=olip2n.rni -MINMATCH=0.1-LOOPCL=0
-LOOPEXT=0-UNITS=bits_STRAT=1 -END=-1 -MATRIX=olip30_-TRANS=human40.cdi
-LIST=1000 -DOCALIGN=200 -THR_SCORE=quality_-THR_MIN=75 -ALIGN=50 -MODE=LOCAL
-OUTPMT=pto -NORM|sext._HEAPSIZE=500 -MINLEN=0-MAXLEN=2000000000
-USER=US10029345_0CGN_Y_11_105_0runat_09022005_091322*26420 -NCPU=6 -ICPU=3
-NO_MMAP_-LARGEQUERY_NEG_SCORES=0 -MAIT_-DSPBLOCK=100 -LONGLOG_-DEV_TIMEOUT=30 -THREADS=1 -XGAPEXT=60 -FGAPOP=6
-DEV_TIMEOUT=120 -MARN_TIMEOUT=30 -THREADS=1 -XGAPEXT=60 -FGAPOP=6
-PGAPEXT=7 -YGAPOP=60 -YGAPEXT=60 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Searched
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Command line parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Post-processing: Listing first 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Database :
                                                                                                                                                                                                                                                                                                                                                     Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB DB
                                                                                                                                                                                                                                                                   Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          eq
geq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of hits
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         nucleic search,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Xgapop 60.0 , X
Ygapop 60.0 , X
Fgapop 6.0 , I
Delop 6.0 , I
                                                                                                                                                                                                                                                                Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OLIGO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           February 14,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Issued_Patents_NA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1202784 seqs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MAHEMIGTQIVTERLVALLE.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-029-345A-109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                          /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6A_COMB.seq:*
/cgn2_6/ptodata/1/ina/6A_COMB.seq:*
/cgn2_6/ptodata/1/ina/BCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              eatisfying
                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000000000
                                                                                                                                                                                                               1998
3544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GenCore version (c) 1993 - 2005
                                                                                                                                                                                                                                                                  DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2005, 11:04:42; Search time 291 Seconds (without alignments)
3739.258 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Xgapext 60.0
Ygapext 60.0
Fgapext 7.0
Delext 7.0
                                                                                                                                                                                                               44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     818138359 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                chosen
                                                                                                                                                                                                                                                                  IJ
                                                                                                                                                                                                               US-09-816-494-3
US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          summaries
                                                                                                                                                           ALIGNMENTS
                                                                                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15.1.6
Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                .LGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ٠,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                i
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N
                                                                                                                                                                                                              Sequence
Sequence
                                                                                                                                                                                                                                                                Description
                                                                                                                                                                                                              ب پ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                665
                                                                                                                                                                                                              Appli
Appli
                                                                               S
                                                                                                                    밁
                                                                                                                                                      S
                                                                                                                                                                                           片
                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-029-345A-109 (1-665) x US-09-816-494-3 (1-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 10
SOFTWARE: FASTSEQ for Windows Version
SEQ ID NO 3
LENGTH: 1998
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR FILE REFERENCE: 10448-030002
                                                  659
                                                                                   220
                                                                                                                                                        200
                                                                                                                                                                                             540
                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                     161
                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                                                                                                                                                                     GCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT
                                                                                                                                                                                                                                                                                      ArgIleLeuPróAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                             ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerGlyThrGluLysValLeuLeuIleAspSerArgProPhevelGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                         heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                                               -GlnGlnAsnGivileGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP
                                                                                                                                                                                                                                                                                                                                        ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                               CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CysSerGlnLysVálValValTyrAspGlnSerSerGlnAspVálAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                  CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
99.40%
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0 04
```

74.1

180

480

240

718

220

658

200 539

598

160

140

420

360 120 300 100 180

120 40

20 60

1858

```
rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG 620
                                                                                                CTGCCTÁCAGCTGCÁGCCÁGCTGCCCACTTGCGGÁGÁCCAÁGTCTÁTTCTGTGCGCÁGGC 1798
                                                                                                                                              isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                acredahrarerredecececeadaeererhaeeerreraeeeradeeridaeeaderidarirrig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rárcriccácnecanceanágreggágegregágágacaantháceacaceagerrectririce
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 adadcaadcoaarrigcarrodorcadaacaadcaadcadcadcodococadaadorococrrr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAAGGCCTTCAGACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        achaderhátgéchagárácáteltettékettékagáháchártegahagehekettékette
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rerecheáreádakakidertrideádatáetádádakertreckáetádiredekideket 1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rckérésécrésékértéreszásakakásásárásákákásákákákátákásárákásátákásátákásátákásátákását 1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlai 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  recenhecenece a de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentración de la recentraci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cergrigedadrergeradericadadgeageageageageageagecegrigearecegeageg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Archaccrerected in a receive de la comparación de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta de la contracta
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProp 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A C LAGA CT GGA G CAT CAGG C CAAA GA GC AAA CT CAAG CT GCT GCA CCT GGA GAAG C CAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ĊŦĀŦĀŦĊŦĊĊĀĀĀĊŦŦĊĀĀŦŤŦŦĊŦĠĠĠĊĊĀĀĊŦĊĊŦĠĠĀĊŦĀŦĠĀĠĀĀĠĀĀĠĀŦŦĀĀĠĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rGGATÄTCAÄÄTCAĞTTTCÄTÄTTCAĞCCAĞCATĞĞCAĞCAİTCÖTTACÄTĞĞCT
                                                                                                                                                                                                                                              1738
                                                                                                                                                                                                                                                                                                                580
                                                                                                                                                                                                                                                                                                                                                                                     1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                260
                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 1, Application US/09816494
Patent NO. 6664089
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
ITILE OF INVENTION: 38692 AND 21117, NOVEL DUJ
ITILE OF INVENTION: PHOSHATASE MOLECULES ANI
CURRENT APPLICATION NUMBER: US/09/816,494
PRIOR APPLICATION NUMBER: US 60/191,858
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FastSEQ for Windows Version 4.0
LENGTH: 3544
TYPE: DNA
ORGANISM: Homo Bapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-029-345A-109 (1-665) x US-09-816-494-1 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; FEATURE;
; NAME/KEY; CDS
; LOCATION: (589)...(2583)
US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뭉
889 GÁCTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                               101
                                                                                                                                                                                     829
                                                                                                                                                                                                                                                                                                                           769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     649
                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         589 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41 HisileLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1979 AAATCATTGAGGTCTCC 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1859
                                      AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120
                                                                                                                                                                                 ĠŔĊŔŔŔĠŤĠŤŤŔŔŦŤŔĊŔĠŔĠĊŦĊŔŦĊĊŔĠĊŔŦŤĊŔĠĊĠŔŔŔĊŔŤŔŔĠĠŤŦĠŔĊŔŤŤĠŔŔ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          640
                                                                                                                                                                                                                                                                                                                           ĊĀĊĀTŦŦŦĠĠĀĀĠĊĊĀŦŦĀĀŦĀŦĊĀĀĊŦĠĊŦĊĊĀĀĠĊŦŦĀŦĠĀĀĠĊĠĀĀĠĠŦŦĠĊĀĀĊĀĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTGGAAAGAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     luIleIleGluValSer 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DUAL SPECIFICITY AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3544
663
0
```

5 8 8

ДЬ S ਰ S 밁 S В S 문 S 밁 Ś 뭐 Ś В ঠ 망 Ś 멍 Ś 밁 Ś 8 Ś В S Д Ś ₽ Ś 밁 S 뮍

1679

828

80 768

708

648

888

1619

560

1559

540

1499

500

520

1439

480

1379

460

1319

1199

420

1139

380

400

1079

1019

340 959

320 899 300 839

_	480 lnSerLysArgLeuHisSerValArgThrSerSerGerGlyThrAlaGlnArgSerLeuL 500	4.
	460 rohsplysGluGluhlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG 480 	19
	440 snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP 460 	19 4
; ————————————————————————————————————	420 heserselegiühaspalaleugluTyrTyrLysProSerThrThrLeuAspGlyThrA 440 	18 4
and the second s	400 heSerieunspiielysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP 420	17
100	380 (17 3
	360 alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL 380	16 3
	340 roCysalaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV 360 	16
	320 snGluProValProAlaValSerGluGlyGlyGlyGlnLysSerGluThrProLeuSerProP 340	
-	300 snGlnThrGlyÅlaSerGlyProLysSerLysLeuLysLeuLisLeuGluLysProA 320 	
	280 hrīleSerProAsnPheAsnPheLeuGlyGlnLeuLeuÁspTyrGluLysLysIleLysA 300 	
	260 etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT 280 	
	240 alleu .307 TTCTA	
	220 euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV 240 	
	200 heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL 220 	
		11 1
······	161 ArgililauproasnieuTyrleuGlyCysGlnárgásgyálleuasniysGluleuIle 180 	10
*	ValProThrCysIleSerGlnProCysLéuproValAlaAssnIleGlyProThr 160 	10
	121 LeuAlaGlyGlyBheAlaGluPheSexArgCy8pheproglyLeuCy8GluGlyLy8Sex 140	9 1

음 성 음

8

음 성 음

중 유

8 8 8 8 8 8 8

olipan.rni	Page 3
	A STATE OF THE STA
500 euSerProLeuHisArgSerGlySerValGluAspA	.snTyrHisThrSerPheLeuPheG 520
2087 TATCTCCACTGCATCGAAGTGGGAGGGGGGGACAATTACCACCAGCTTCCTTTTCG	ATTACCACACCAGCTTCCTTTTCG 2146
520 lyLeuSerThrSerGlnGlnHisLeuThrLysSerA	laGlyLeuGlyLeuLy8GlyTrpH 540
2147 GCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCCTGGCCTGGGCCTTAAGGGCTGGC	CTGGCCTGGGCCTTAAGGGCTGGC 2206
540 1sSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA	erLeuThrSerSerTrpTyrPheA 560
2207 ACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTG	CCCTGACCAGCAGCTGGTATTTTG 2266
560 laThrGluSerSerHisPheTyrSerAlaSerAlaI	leTyrGlyGlySerAlaSerTyrS 580
2267 CCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT	TCTACGGAGGCAGTGCCAGTTACT 2326
580 erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA	.spGlnValTyrSerValArgArgA 600
2327 CTGCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGC	ACCAAGTCTATTCTGTGCGCAGGC 2386
600 rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG	erTrpHisGluGluSerProPheG 620
2387 GGCAGAAGCCAAGTGACAGAGCTGACTCGCCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTC	GCTGGCATGAAGAGAGCCCCTTTG 2446
620 luLysGlnPheLysArgArgSerCysGlnMetGluP	heGlyĠluSerIleMetSerGluA 640
2447 AAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAAGAGAGAG	TTGGAGAGAGATCATGTCAGAGA 2506
640 snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG	
2507 ACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTC	AGTCTAGCTTTTCGGGCAGCATGG 2566
660 luIleIleGluValSer 665	i
2567 AAATCATTGAGGTCTCC 2583	
	AGACCAGGOCTTCACACTCCCAAACCTCCAACCAGCAGTCAGCAGTCACAGCAGTCAGCAGTCAGCAGTCCCTTTCCCACTCACT

Search completed: February 14, 2005, 14:08:29 Job time : 298 secs

manda da Antonio

This Page Blank (uspto)

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Word size
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Post-processing: Listing first 1000 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                         Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                        Published Applications AA:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*

9: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

9: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

11: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

12: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

13: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

15: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

16: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

16: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

18: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/US10B_PUB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/US10B_PUB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/US10B_PUB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/US10B_PUB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/US10B_PUB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/US10B_PUB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                   Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OLIGO
Gapop 60.0 , Gapext 60.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-029-345A-109
665
1 MAHEMIGTQIVTERLVALLE.....LGKVGSQSSFSGSMEIIEVS 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pebruary 9, 2005, 12:25:39; Search time 135 Seconds (without alignments) 1604.386 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1373511 seqs, 325702437 residues
     50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Copyright
     6666666666651
6666666666666617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
       US-09-964-277-21
US-09-9616-494-2
US-09-9616-494-2
US-09-964-277-2
US-09-964-277-2
US-09-964-277-2
US-09-964-277-2
US-09-964-277-2
US-10-072-012-681
US-10-168-506-14
US-10-168-506-14
US-10-168-506-2
US-10-168-508-2
US-10-168-503-240
US-10-648-593-247
US-10-377-072-26
                                                                                                                                                                                                                                                         片
                                                                                                                                                                                                                                                                                                           SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           24
Sequence 21, Appli
Sequence 2, Appli
Sequence 2, Appli
Sequence 2312, Ap
Sequence 26, Appl
Sequence 680, App
Sequence 681, Appli
Sequence 14, Appli
Sequence 2, Appli
Sequence 240, Appli
Sequence 240, Appli
Sequence 247, App
Sequence 247, Appli
                                                                                                                                                                                                                                                       Description
```

8 밁 S

406 554 346 494 286 434

TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW 613

HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS 665

TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL

405 553

RESULT

N

466

δ 片 Ś 밁 Ś 밁

> 374 166

226

TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG

493 285 433 225 373

106 IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL 165

LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED

LHLEKPNEPVPAVSEGGOKSETPLSPPCADSATSEAAGORPVHPASVPSVPSVQPSLLED

밁

S17; 18 0; Gaps 0; 10 O; Gaps 0; 11	ion US/09964277 170A1 1f M. DSP-16 DUAL-SPECIFICITY PHOSPHATASE 25.434 US/09/964,277 2001-09-25 20 20 r Windows Version 4.0 r Windows Version 4.0 ens ens ens 110.0%; Score 472; DB 9; Length 100.0%; Pred. No. 0; vative 0; Mismatches 0; Inde: ESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNG	964-277- ence 21, nt No. LICANT: LICANT: LICANT: LICANT APP E REFERE RENT FIL BER OF S TWARE: 51 NGTH: 51 NGTH: 51 NGTH: 51 NGTH: 51 NGTH: 51 PA: PRT
	ALIGNMENTS	RESULT 1
Sequence 679, App Sequence 703, App Sequence 54204, A Sequence 256, App Sequence 258, App Sequence 1259, Ap Sequence 4872, App Sequence 6872, App Sequence 683, App Sequence 683, App Sequence 578, App	.0 690 15 US-10-072-012-679 .0 690 15 US-10-072-012-703 .0 690 15 US-10-425-114-54204 .2 680 15 US-10-072-012-256 .7 662 15 US-10-072-012-258 .8 672 15 US-10-072-012-259 .9 253 15 US-10-296-115-1259 .9 253 15 US-10-108-260A-4872 .1 660 15 US-10-072-012-682 .6 677 15 US-10-072-012-683 .6 68 9 US-09-764-853-578	14 472 71.0 15 472 71.0 16 472 71.0 17 394 59.2 18 304 45.7 19 258 48.7 19 25.9 152 22.9 152 22.9 16.2 21 108 16.2 22 67 10.1 23 64 9.4 24 56 8.4

```
RESULT 3
US-09-964-277-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-816-494-2
                                                                                                                                                                              Sequence 2, Application US/09964277
Patent No. US20020137170A1
GENERAL INFORWATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-816-494-2
   SOFTWARE: PastSEQ for Windows Version 4.0 SEQ ID NO 2 LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 2, Application US/09816494
Patent No. US2002034807A1
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY
TITLE OF INVENTION: HOSPHATASE MOLECULES AND USES THEREFOR
FILE REFERENCE: 1048-030002
CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT APPLICATION NUMBER: US 60/191,858
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
                                                          APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125.434
CURRENT APPLICATION NUMBER: US/09/964,277
CURRENT FILING DATE: 2001-09-25
NUMBER OF SEQ ID NOS: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local !
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: FastSEQ for Windows Version SEQ ID NO 2
LENGTH: 665
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                    614 HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS 665
                                                                                                                                                                                                                                                                                                                                                                            554
                                                                                                                                                                                                                                                                                                                                                                                                             554
                                                                                                                                                                                                                                                                                                                                                                                                                                               494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           al Similarity 100.0%; Score 472; Dal Similarity 100.0%; Pred. No. 0; 472; Conservative
                                                                                                                                                                                                                                                                                                                                                                                             TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRRQKFSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                     TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                   TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGIGLKGWHSDTLAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTLOGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSAGMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCFKPDF1PESHFLRVPVNDSFCEKILPWLDKSVDF1EKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                    HEESPFEKOFKRRSCOMEFGESIMSENRSREELGKVGSOSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ĬĀĪĀYĪMKRMDMSLDEĀYRFVKEKRPTISPNFNFLGOLLDYEKKIKNOTGĀSGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IAIAYIMKRMDMSLDEAYRFVKEKRPTISBNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         553
                                                                                                                                                                                                                                                                                                                                                                                                      613
                                                                                                                                                                                                                                                                                                                                                                                                                                      553
                                                                                                                                                                                                                                                                                                                                                                       613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
```

Ş

```
; ORGANISM: Homo sapiens
US-09-964-277-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 472; Conserv
     614
                                     614
                                                                      554
                                                                                                      554
                                                                                                                                        494
                                                                                                                                                                      494
                                                                                                                                                                                                        434
                                                                                                                                                                                                                                        434
                                                                                                                                                                                                                                                                         374
                                                                                                                                                                                                                                                                                                         374
                                                                                                                                                                                                                                                                                                                                                                           314
                                                                                                                                                                                                                                                                                                                                                                                                    254 TATAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                       254 IAIAYIMKRMDMSLDEAYRFVKEKRPTISDNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                        HEESPFEKOFKRRSCOMEFGESIMSENRSREELGKVGSOSSFSGSMEIIEVS
                                                                                                                             TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                    TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGIGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                    TTLDGTNKLCQFSPVQELSEQTPETSPDKEEAS1PKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                  LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                       LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVQPSVQPSLLED 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
HEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSOSSFSGSMEIIEVS
                                                                                     TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                 TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                  SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                         SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          71.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 472;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DВ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ç,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ۰,
                              665
665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                 613
                                                                                                 613
                                                                                                                                 553
                                                                                                                                                                 553
                                                                                                                                                                                                                                  493
                                                                                                                                                                                                                                                                                                  433
                                                                                                                                                                                                  493
                                                                                                                                                                                                                                                                    433
                                                                                                                                                                                                                                                                                                                                    373
                                                                                                                                                                                                                                                                                                                                                                                                     313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       253
```

```
APPLICANT: SEKI, NAOHIKO
APPLICANT: YOSHIKAWA, TSUTOMU
APPLICANT: OTSUKA, MOTOVUKI
APPLICANT: NAGALIARI, KENJI
APPLICANT: NAGALIARI, KENJI
APPLICANT: NAGHO, YASUHIKO
TITLE OF INVENTION: NOVEL FULL-LENGTH CDNA
FILE REFERENCE: 084335/0160
CURRENT APPLICATION NUMBER: US/10/094,749
CURRENT FILING DATE: 2002-03-12
PRIOR APPLICATION NUMBER: 60/350,435
PRIOR FILING DATE: 2002-01-24
PRIOR APPLICATION NUMBER: JP 2001-328381
PRIOR FILING DATE: 2001-09-14
NUMBER OF SEQ ID NOS: 3381
SOFTWARE: PATENTIN VET: 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 4
US-10-094-749-2312
Sequence 2312, Application US/10094749
Publication No. US20030219741A1
                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION
APPLICANT: ISOGAI,
APPLICANT: SUGIYA
                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           INFORMATION:
                                                                                                                                                                                                                                                                                                                         ISONO, TURI
                                                                                                                                                                                                                                                                                                                                          YAMAMOTO, JUN-
                                                                                                                                                                                                                                                                                                                                                                                SUGIYAMA, TOMOYA
OTSUKI, TETSUJI
WAKAMATSU, AI
SATO, HIROYUKI
ISHII, SHIZUKO
                                                                                                                                                                                                                                                                            OTSUKA, KAORU
NAGAI, KEIICHI
IRIE, RYOTARO
                                                                                                                                                                                                                                                                 TAMECHIKA, ICHIRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAKAO
                                                                                                                                                                                                                                                                                                                                                                     JUN-ICHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOMOYASU
```

뭐 Ś 밁 S 밁 8 밁 Ś 밁 Ş 밁 S 밁 Ś

```
RESULT 5
US-10-377-072-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; SEQ ID NO 2312
; LENGTH: 665
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-094-749-2312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
             CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR PILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR PILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR PILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/843,297
                                                                                                                                                                                                                                                                                                                                                          Sequence 26, Application US/10377072
Publication No. US20040009501A1
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                               APPLICANT: Rudolph-Owen, Laura A.
APPLICANT: Chun, Miyoung
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: AND USES THEREFOR
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPI03-0180MNIM
OR PILING DATE: 2001-06-29
OR APPLICATION NUMBER: US 60/215,370
OR APPLICATION NUMBER: US 09/723,806
OR APPLICATION NUMBER: US 09/723,806
OR APPLICATION NUMBER: US 60/187,455
OR APPLICATION NUMBER: US 60/187,455
OR FILING DATE: 2000-03-07
OR APPLICATION NUMBER: US 09/843,297
OR FILING DATE: 2001-04-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LHLEKPNEPVPAVSEGGQKSETFLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HEESPFEKOFKRRSCOMEFGESIMSENRSREELGKVGSOSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRRQKFSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                 Meyers, Rachel E. Williamson, Mark J.
                                                                                                                                                                                                                                                                                                                                                Glucksmann, Maria A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  71.0%;

; Score 472; DB

%; Pred. No. 0;

0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>5</u>99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                 RESULT 6
US-10-072-012-680
; Sequence 680, App
; Publication No. U
                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 472
                                                                APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                   APPLICANT:
                                                    APPLICANT:
                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                    554
                                                                                                                                                                                                                                                                                                                                                                                                                  554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    314
                                                                                                                                                                                                                                                                                                                                                  614
                                                                                                                                                                                                                                                                                                                                                                                                                                                   494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   472;
```

```
; SOFTWARE: FASTSEC, ; SEQ ID NO 26; LENGTH: 665; TYPE: PRT; ORGANISM: Homo SUS-10-377-072-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR PILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR FILLING DATE: 2001-05-21
PRIOR PILLING DATE: 2001-05-19
PRIOR PILLING DATE: 2000-05-19
PRIOR PILLING DATE: 2001-03-23
PRIOR PILLING DATE: 2001-03-23
PRIOR PILLING DATE: 2001-03-23
PRIOR PILLING DATE: 2001-03-22
PRIOR PILLING DATE: 2001-03-22
PRIOR FILLING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Remaining Prior Application data NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IAIAYIMKRMDMSIDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
||||||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                        HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                   TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                               TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTXSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                          TTLDGTNKLCQFSFVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                           SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                   SPLVQALSGIHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASIHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LHLEKPNEPVPAVSEGGOKSETPLSPPCADSATSEAAGORPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
HEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                         TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                    TAQRSILSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                  TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  71.0%; Scilarity 100.0%; E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               %; Score 472; DB
%; Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            removed -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                           613
                                                                                                                                                                                                                                                                                                                                  493
                                                                                                                                                                                                                                                                                                                                                                                                                           433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           253
                                                                                                                                                                                         553
                                                                                                                                                                                                                                                                                    493
                                                                                                                                                                                                                                                                                                                                                                             433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

```
US-10-072-012-680

Sequence 680, Application US/10072012

Sequence 680, Application US/10072012

Sequence 680, Application US/10072012

Sequence 680, Application US/10072012

Publication No. US20040033493A1

GENERAL INFORMATION: Velizar

APPLICANT: Tchernev, Velizar

APPLICANT: Spytek, Kimberly

APPLICANT: Patturajan, Meera

APPLICANT: Li, Li

APPLICANT: Li, Li

APPLICANT: Gangolli, Esha

APPLICANT: Anderson, David W.

APPLICANT: Rastelli, Luca

APPLICANT: Rastelli, Luca

APPLICANT: Rastelli, Luca

APPLICANT: Gerlach, Valerie
```

Gusev, Vl

Taupier Jr, Raymond Gusev, Vladimir Y.

```
Ś
                                                                                                         밁
                                                                                                                                           S
                                                                                                                                                                               밁
                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; SEQ ID NO 680
LENGTH: 665
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-072-012-680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/265,514
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Burgess, Catherine E. TITLE OF INVENTION: Proteins and Nucleic Acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILE REFERENCE: 21402-258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/265,412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/267,459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 2001-02-05
APPLICATION NUMBER: 60/267,057
FILING DATE: 2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/266,767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: 60/266,406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/266,975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/265,395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
554 TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                     494
                                                                    494
                                                                                                           434
                                                                                                                                             434
                                                                                                                                                                                 374
                                                                                                                                                                                                    374 SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                       314
                                                                                                                                                                                                                                                                                         314
                                                                                                                                                                                                                                                                                                                                                                 254
                                                                                                                                                                                                                                                                                                                                                                                                   194 TCPKPDF1PESHFLRVPVNDSFCEKILPWLDKSVDF1EKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                           194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                             254 IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                          TAORSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                  TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                 SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                     LHLEKPNEPVPAVSEGGOKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                              LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                     IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                         TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Furtak, Katarzyna
Grosse, William M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lepley, Denise M. Rieger, Daniel K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Wolenc, Adam R
Pena, Carol E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alsobrook II, John P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Colman, Steven D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001-02-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         71.0%; Score 472; DE 100.0%; Pred. No. 0; tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 15; Length 665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>,</u>
                                                                                                                                                                                                                     433
                                                                                                                                                                                                                                                                                                                             313
                                                                                                                                                                                                                                                                                                                                                                                                     253
                                                                                                           493
                                                                                                                                             493
                                                                                                                                                                                 433
                                                                                                                                                                                                                                                       373
                                                                                                                                                                                                                                                                                         373
                                                                                                                                                                                                                                                                                                                                                                 313
```

```
; ORGANISM: Homo sapiens US-10-072-012-681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 7
US-10-072-012-681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR FILING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR APPLICATION NUMBER: 60/267,459
                                                                                                                                                     SOFTWARE: PatentIn Ver.
SEQ ID NO 681
LENGTH: 665
Query Match 71.0%; Score 472;
Best Local Similarity 100.0%; Pred. No.
Matches 472; Conservative 0; Mismatch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 681, 1
Publication No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR APPLICATION NUMBER: 60/265,517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Lepley, Denise M.
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Tchernev, Velizar APPLICANT: Spytek, Kimberly
                                                                                                                              LENGTH: 66
TYPE: PRT
                                                                                                                                                                                                                 Remaining Prior Application data NUMBER OF SEQ ID NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/265,395 PRIOR FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/266,406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                614 HEESPFEKOFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rastelli, Luca
Miller, Charles E.
Gerlach, Valerie
Taupier Jr, Raymond J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Anderson,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Padigaru,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gangolli, Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gusev, Vladimir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patturajan, Meera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Zerhusen, Bryan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application US/10072012
5. US20040033493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Muralidhara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  David W.
                                                                                                                                                                                                                                            removed -
                                                                                                                                                                                                                                         See File Wrapper
                                            15;
                                              Length 665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      613
```

Mismatches

0

0

Gaps

```
PRIOR APPLICATION NUMBER: PCT/US00/34736;
PRIOR FILING DATE: 2000-12-21;
NUMBER OF SEQ ID NOS: 76;
SOPTWARE: PatentIn Ver. 2.1;
SEQ ID NO 14;
LENGTH: 665;
TYPE: PRT;
ORGANISM: Homo sapiens
US-10-168-506-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 8
US-10-168-506-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ફ
                                                     밁
                                                                                    ঠ
                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                 Ś
                                                                                                                                                  გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 472; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 14, Application US/10168506
Publication No. US20040053229A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: FLANAGAN, PETER
TITLE OF INVENTION: MAMMALIAN PROTEIN PHOSPHATASES
FILE REFERENCE: 038602/1351
CURRENT APPLICATION NUMBER: US/10/168,506
CURRENT FILING DATE: 2002-06-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: PLOWMAN, GREGORY D. APPLICANT: MARTINEZ, RICARDO APPLICANT: WHYTE, DAVID APPLICANT: MANNING, GERARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                     314
                                                     254
                                                                                      254
                                                                                                                        194
                                                                                                                                                         194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             194
                                                                                                                      TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
LHLEKPNEPVPAVSEGGQKSETFLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                             TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                                                          IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSOSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRRQKFSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTLDGTNKLCQPSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                     IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HEESPPEKQFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSMEITEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TATAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUDARSANAM, SUCHA
                                                                                                                                                                                         Conservative
                                                                                                                                                                                                      71.0%; Score 472; DB 15; Length 665; 100.0%; Pred. No. 0;
                                                                                                                                                                                       <u>,</u>
                                                                                                                                                                                         Mismatches
                                                                                                                                                                                         0;
                                                                                                                                                                                       <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      599
                                                     313
                                                                                    313
                                                                                                                      253
                                                                                                                                                        253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   433
```

```
APPLICANT: LINCILE GENOMICS, INC., IANG, AND APPLICANT: VAO, MONIQUE G., BURFORD, Neil APPLICANT: WANG, Yumei E., STEWART, Elizabeth A. APPLICANT: WANG, Yumei E., STEWART, Elizabeth A. APPLICANT: LEE, Ernestine A., HAVIZU, Chandra S. APPLICANT: LU, Dyung Aina M., TRIBOULEY, Catherine M. APPLICANT: LU, Dyung Aina M., TRIBOULEY, Catherine M. APPLICANT: WUJYEN, Danniel B., CHAWLA, Mariah R. APPLICANT: WOUYEN, Danniel B., CHAWLA, Nariader K. APPLICANT: KEARNEY, Liam
TITLE OF INVENTION: PROTEIN PHOSPHATASES
FILE REFERENCE: PI-0173 PCT
CURRENT APPLICATION NUMBER: US/10/343,357
CURRENT FILING DATE: 2001-07-28
PRIOR APPLICATION NUMBER: US 60/221,679
PRIOR FILING DATE: 2000-07-28
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: US 60/221,679
PRIOR APPLICATION NUMBER: US 60/223,272
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR FILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR APPLICATION NUMBER: US 60/226,728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 9
US-10-343-357-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                         US-10-343-357-7
                                                                                                                                                                                                       SEQ ID NO 7
LENGTH: 665
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 7, Application US/10343357 Publication No. US20040058341A1 GENERAL INFORMATION:
Matches 472;
                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: INCYTE GENOMICS, APPLICANT: ELLLOTT, Vicki & APPLICANT: YAO, Monique G., APPLICANT: WANG, Yumei E.; APPLICANT: GANDHI, Ameena F
                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US PRIOR FILING DATE: 2000-09-08 NUMBER OF SEQ ID NOS: 20 SOFTWARE: PERL Program
                                                                                      FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No. US20040058341A1 7480570CD1
                        Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 614 HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            314 LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSOSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
  Conservative
                                                                                                                                                                                                                                                                                                                                                                 2000-09-08
                             71.0%; Score 472;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INC.; TANG, Y. Tom
                                                                                                                                                                                                                                                                                                                                                                                               60/231,366
0
  Mismatches
                                                     B
                                                   15;
0
                                                Length 665;
  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3
  <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       665
  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     433
```

S

194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT 253

```
S
                                                           밁
                                                                                      Ś
                                                                                                                       밁
                                                                                                                                                 8
                                                                                                                                                                                   밁
                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 10
US-10-257-026-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                경 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                              뭐
                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                       US-10-257-026-2
                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Merck Patent GmbH
TITLE OF INVENTION: New dual specificity phosphatase
FILE REFERENCE: DUSPIOKDWS
CURRENT APPLICATION NUMBER: US/10/257,026
CURRENT FILING DATE: 2003-11-07
NUMBER OF SEQ ID NOS: 3
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2
LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 2, Application US/10257026 Publication No. US20040086859A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 472; Conserv
                                                                                                                                                                                                                                                                                                                                                                                    TYPE: PRT
ORGANISM: Homo sapiens
                                                           374
                                                                                       374
                                                                                                                      314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  194
434
                            434
                                                                                                                                                    314
                                                                                                                                                                                   254
                                                                                                                                                                                                                 254
                                                                                                                                                                                                                                               194
                                                                                                                                                                                                                                                              194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  254
                                                                            SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                                                                                                                      LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                   IAIAYIMKRMDMSLDEAYRFVKEKRFIISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                               TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW 613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTXSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                 TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                           SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAORSILSPLHRSGSVEDNYHTSFLFGLSTSQOHLTKSAGLGLKGWHSDILAPOTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                         LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                       71.0%; Score 472; D
100.0%; Pred. No. 0;
                                                                                                                                                                                                                                                                                                         <u>,</u>
                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                         DB
                                                                                                                                                                                                                                                                                                                                       15;
                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                      Length 665;
                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     313
                            493
                                                           433
                                                                                           433
                                                                                                                         373
                                                                                                                                                    373
                                                                                                                                                                                    313
                                                                                                                                                                                                                 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           373
```

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: PRT ; ORGANISM: Homo sapiens US-10-648-593-240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 11
US-10-648-593-240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                             밁
                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/10/648,593
CURRENT FILING DATE: 2003-08-26
PRIOR APPLICATION NUMBER: 60/406,385
PRIOR FILING DATE: 2002-08-27
NUMBER OF SEQ ID NOS: 557
SOFTWARE: PATENTIN VERSION 3.2
SEQ ID NO 240
LENGTH: 665
THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM TO THE TERM T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 240, Application US/10648593

Publication No. US20040106132A1

GENERAL INFORMATION:

APPLICANT: Bristol-Myers Squibb Company

TITLE OF INVENTION: IDENTIFICATION OF GENES FOR PREDICTING ACTIVITY OF COMPOUNDS TH

TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR

TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS

FILE REFERENCE: D0273 NP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 472; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   494
                                                                                                                                                                                                                                       494
                                                                                                                                                                                                                                                                                                 494
                                                                                                                                                                                                                                                                                                                                                               434
                                                                                                                                                                                                                                                                                                                                                                                                                        434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HEESPFEKOFKRRSCOMEFGESIMSENRSREELGKVGSOSSFSGSMEIIEVS 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IAIAYIMKRMDMSLDEAYREVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                            HEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                        TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LHLEKPNEPVPAVSEGGOKSETPLSPPCADSATSEAAGORPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                             TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                               TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                             TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                       TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                  TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         71.0%; Score 472; Dilarity 100.0%; Pred. No. 0; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
665
                                                      665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         433
                                                                                                                                                                                 613
                                                                                                                                                                                                                                                                                                                                                                                                                                  493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         553
                                                                                                                       613
                                                                                                                                                                                                                                              553
                                                                                                                                                                                                                                                                                                                                                                        493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
```

```
ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                         RESULT 13
US-10-377-072-26
                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-648-593-247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-648-593-247
                 APPLICANT: Millennium Pharmaceuticals In APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph APPLICANT: Glucksmann, Maria A.
APPLICANT: Meyers, Rachel E.
APPLICANT: Williamson, Mark J.
APPLICANT: Rudolph-Owen, Laura A.
APPLICANT: Chun, Miyoung
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/406,385
PRIOR FILING DATE: 2002-08-27
NUMBER OF SEQ ID NOS: 557
SOPTWARE: PATENTIN VERSION 3.2
SEQ ID NO 247
LENGTH: 665
                                                                                                                                                                    Sequence 26, Application US/10377072 Publication No. US20040157221A9 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 247, Application US/10648593

Publication No. US20040106132A1

GENERAL INFORMATION:

APPLICANT: Bristol-Myers Squibb Company

TITLE OF INVENTION: IDENTIFICATION OF GENES FOR PREDICTING ACTIVITY OF COMPOUNDS THAT

TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR

TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS

FILE REPERENCE: D0273 NP

CURRENT APPLICATION NUMBER: US/10/648,593

CURRENT FILING DATE: 2003-08-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches 472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                           614
                                                                                                                                                                                                                                                                                                                                                                                554
                                                                                                                                                                                                                                                                                                                                                                                                                    554
                                                                                                                                                                                                                                                                                                                                                                                                                                                       494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       314
                                                                                                                                                                                                                                                                                                        614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                        HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                             HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS 665
                                                                                                                                                                                                                                                                                                                                                                              TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                      TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTLDGTNKLCQFSFVQELSEQTPETSPDKEEASIFKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IAIAYIMKRMDMSLDEAYRFVKEKRPTIS PNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
Miyoung
Fong-Ying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    71.0%; Score 472;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                        665
                                                                                                                                                                                                                                                                                                                                                                                                                  613
                                                                                                                                                                                                                                                                                                                                                                                                                                                       553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        373
                                                                                                                                                                                                                                                                                                                                                                                613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             253
```

```
Ş
                                                                                      밁
                                                                                                                    S
                                                                                                                                                                         밁
                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                               무
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Homo US-10-377-072-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2003-02-27
PRIOR PPLICATION NUMBER: US 09/895,860
PRIOR PPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 99/723,806
PRIOR PILING DATE: 2000-01-28
PRIOR PILING DATE: 2000-01-28
PRIOR PILING DATE: 2000-01-28
PRIOR PILING DATE: 2000-03-07
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR PILING DATE: 2000-04-25
PRIOR PILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR PILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR PILING DATE: 2000-04-26
PRIOR PILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR PILING DATE: 2001-05-21
PRIOR PILING DATE: 2000-05-19
PRIOR PILING DATE: 2000-05-19
PRIOR PILING DATE: 2000-05-19
PRIOR APPLICATION NUMBER: US 09/861,494
PRIOR PILING DATE: 1001-03-29
PRIOR PILING DATE: 1001-03-29
PRIOR PILING DATE: 1001-03-29
PRIOR PILING DATE: 1001-03-29
PRIOR PILING DATE: 1001-03-29
PRIOR PILING DATE: 1001-03-29
PRIOR PILING DATE: 1001-03-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Fas
SEQ ID NO 26
LENGTH: 665
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Remaining Prior Application data NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: NOVEL 25869, 25934, 2.
TITLE OF INVENTION: 38692, 46508, 16816,
TITLE OF INVENTION: AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILE REFERENCE: MPI03-0180MNIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 2001-03-23
APPLICATION NUMBER: US 09/815,419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 2001-03-22
                                                                                      554
                                                                                                                               554
                                                                                                                                                                                                                                                                                                                                                      374
                                                                                                                                                                                                                                                                                                                                                                                                  374
                                                                                                                                                                                                                                                                                                                                                                                                                                           314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             472;
614
                                                                                                                                                                           494
                                                                                                                                                                                                                    494
                                                                                                                                                                                                                                                               434
                                                                                                                                                                                                                                                                                                         434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IAIAYIMKRMDMSLDEAYRFVKEKRPTIS PNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCPKPDF1PESHFLRVPVNDSFCEKILPWLDKSVDF1EKAKASNGCVLVHCLAGISRSAT
                                                                                                           TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRRQKFSDRADSRRSW
                                                                                                                                                                                                    TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                         TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                           SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                           LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
  HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                      HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                           TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                      SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                               TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               71.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 472;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         removed -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             26335, 50365, 21117,
6, 16839, 49937, 49931 AND 49933 MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                  613
                                                                                                                                                                             553
                                                                                      613
                                                                                                                                                                                                                                                               493
                                                                                                                                                                                                                                                                                                           493
                                                                                                                                                                                                                                                                                                                                                      433
                                                                                                                                                                                                                                                                                                                                                                                               433
                                                                                                                                                                                                                                                                                                                                                                                                                                           373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      253
```

US-10-072-012-679

Sequence 679, Appublication No.

Application US/10072012 o. US20040033493A1

INFORMATION:

Velizar

```
밁
                                                                   Ś
                                                                                                         밁
                                                                                                                                                                                                                                                     ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-072-012-679
                                                                                                                                                                                                                                                                                                                           SEQ ID NO 679
                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                Matches 472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/265,102
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR APPLICATION NUMBER: 60/265,102
                                                                                                                                                                                                                                                                                                                                          Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEQ ID NOS: 1391
SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT
                                                                                                                                                                                                                                                                                                          LENGTH: 690
                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE: 2001-01-31
APPLICATION NUMBER: 60/265,517
FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/265,412 FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/265,514
                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/267,459
                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/266,975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/267,057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: 60/266,767 FILING DATE: 2001-02-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/266,406 FILING DATE: 2001-02-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 2001-01-31
APPLICATION NUMBER: 60/265,395
                                   279
                                                                     254
                                                                                                          219
314 LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                               194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                            IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                          TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Tchernev, Velizar
Spytek, Kimberly
                                   IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Wolenc, Aug...
Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lepley, Denise M. Rieger, Daniel K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Furtak, Katarzyna
Grosse, William M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Taupier Jr, Raymond J. Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Patturajan, Meera
Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alsobrook II, John P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gerlach, Valerie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Padigaru, Muralidhara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gangolli, Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Miller, Charles E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Anderson, David W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Zerhusen, Bryan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Colman, Steven D.
                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                      2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001-01-31
                                                                                                                                                                                                 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Luca
                                                                                                                                                                                                                   71.0%;
                                                                                                                                                                          0;
                                                                                                                                                                                                 Score 472; ; Pred. No.
                                                                                                                                                                                Mismatches
                                                                                                                                                                                               0
                                                                                                                                                                                                                   DB 15;
                                                                                                                                                                                <u>.</u>
                                                                                                                                                                                                                   Length 690;
                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Same
                                                                                                                                                                                0;
                                                                                                                                                                              Gaps
                                                                     313
 373
                                                                                                         278
                                                                                                                                            253
                                                                                                                                                                                0
```

```
á
                                                        밁
                                                                                   Ś
                                                                                                                                           Ś
                                                                                                                                                                            밁
                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                  밁
                                                                                                                  밁
                         614
                                                          579
                                                                                                                  519
                                                                                                                                                494
                                                                                                                                                                              459
                                                                                                                                                                                                                                        399
                                                                                                                                                                                                                                                                    374
                                                                                                                                                                                                                                                                                                  339
639
                                                                                      554
                                                                                                                                                                                                           434
                                                                                                                                                                                                                                                         SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                                                                                                                     TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                             TTLDGTNKL.CQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                          HEESPFEKOFKRRSCOMEFGESIMSENRSREELGKVGSOSSFSGSMEIIEVS
                                                                                      TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                  TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                              TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                      SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                        TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                            665
690
                                                                                                                                                                                                           493
                                                                                                                                                                                                                                                                       433
                                                           638
                                                                                                                                                 553
                                                                                                                                                                                                                                         458
                                                                                       613
                                                                                                                     578
                                                                                                                                                                               518
                                                                                                                                                                                                                                                                                                     398
```

```
APPLICANT: Lepley, Denise M.
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgess, Catherine B.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Sam
FILE REFERENCE: 21402-258
CURRENT APPLICATION UNMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR FILING DATE: 2001-01-31
PRIOR PEPLICATION NUMBER: 60/265,517
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR PRILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR PRILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 15
US-10-072-012-703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFO:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 703, Appublication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PPLICANT:
                     APPLICATION NUMBER: 60/266,767
FILING DATE: 2001-02-05
APPLICATION NUMBER: 60/267,057
FILING DATE: 2001-02-07
                                                                                                                           APPLICATION NUMBER: 60/266,406 FILING DATE: 2001-02-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Colman, Steven D.
Wolenc, Adam R.
Pena, Carol E. A
Furtak, Katarzyna
Grosse, William M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tchernev, Velizar
Spytek, Kimberly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Anderson, David W. Rastelli, Luca Miller, Charles E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alsobrook II, John P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Padigaru, Muralidhara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gangolli, Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Zerhusen, Bryan
Patturajan, Mee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Application US/10072012 o. US20040033493A1
NUMBER: 60/266,975
```

```
APPLICANT: Liu, Jingdong
APPLICANT: Zhou, Yihua
APPLICANT: Zhou, Yihua
APPLICANT: Kovalic, David K.
APPLICANT: Koreen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
ITILE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
ITILE OF INVENTION: Plants and Uses Thereof for Plant Improvement
ITILE OF INVENTION NUMBER: US/10/425,114
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 54204
LENGTH: 690
TYDER. DET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILING DATE: 2001-02-08
Remaining Prior Application data removed - Se
NUMBER OF SEQ ID NOS: 1391
SOPTWARE: Patentin Ver. 2.1
SEQ ID NO 703
LENGTH: 690
TYPE: PRT
; TYPE: PRT
ORGANISM: Homo sapiens
FEATURE: INFORMATION: Clone
US-10-425-114-54204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                      RESULT 16
US-10-425-114-54204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 472
                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                     Sequence 54204, Application US/10425114 Publication No. US20040034888A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Homo sapiens -10-072-012-703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              y Match 71.0%; So
Local Similarity 100.0%; I
hes 472; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IAIAY IMKRMDMSLDEAY REVKEKR PTIS PNENELGQLL DYEKKI KNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                             HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                    ij.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 472; DE; Pred. No. 0; Mismatches
                LIB4119-028-H6_FLI.pep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 690;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   638
                                                                                                                                                                                                              With
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
```

```
Ş
                                   밁
                                                        Ş
                                                                                     밁
                                                                                                          Ş
                                                                                                                                       망
                                                                                                                                                            Ś
                                                                                                                                                                                         밁
                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                              융
                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                     吊
                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 472; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                     472;
         614
                                    579
                                                            554
                                                                                      519
                                                                                                                494
                                                                                                                                        459
                                                                                                                                                                                            399
                                                                                                                                                                                                                    374
                                                                                                                                                                                                                                               339
                                                                                                                                                                                                                                                                                                 279
                                                                                                                                                                  434
                                                                                                                                                                                                                                                                       314
                                                                                                                                                                                                                                                                                                                           254
                                                                                                                                                                                                                                                                                                                                                     219
                                                                                                                                                                                                                                                                                                                                                                              194
                                                                                                                                                                                                                                                                                                HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRRQKFSDRADSRRSW
                                                                                                    TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                               LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                 TCPKPDFIPESHFLRVFVNDSFCEKILFWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                       TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                          SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                    TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKFSDRADSRRSW
                                                                                     TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                        TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                            SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                               LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                     TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                     71.0%; Score 472; Dilarity 100.0%; Pred. No. 0; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                  DB
                                                                                                                                                                                                                                                                                                                                                                                                                                15;
                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                  690;
                                                                                                                                                                                                                                                                                                                                                                                                        0
          665
                                                                                                                                          518
                                                                                                                                                                                                                                                                                                 338
                                    638
                                                              613
                                                                                       578
                                                                                                                553
                                                                                                                                                                   493
                                                                                                                                                                                            458
                                                                                                                                                                                                                     433
                                                                                                                                                                                                                                                398
                                                                                                                                                                                                                                                                       373
                                                                                                                                                                                                                                                                                                                           313
                                                                                                                                                                                                                                                                                                                                                     278
```

```
US-10-072-012-256
; Sequence 256, Application US/10072012
publication No. US20040033493A1
; Publication No. US20040033493A1
; Publication No. US20040033493A1
; Publication No. US20040033493A1
; Publicant: Tokernev, Velizar
APPLICANT: Tokernev, Velizar
APPLICANT: Spytek, Kimberly
APPLICANT: Spytek, Kimberly
APPLICANT: Shimkets, Richard
APPLICANT: Shimkets, Richard
APPLICANT: Li, Li
APPLICANT: Li, Li
APPLICANT: Padigaru, Muralidhara
APPLICANT: Anderson, David W.
APPLICANT: Miller, Charles E.
APPLICANT: Miller, Charles E.
APPLICANT: Gastach, Valerie
APPLICANT: Gastach, Valerie
APPLICANT: Gasev, Vladimir Y.
APPLICANT: Gusev, Vladimir Y.
APPLICANT: Golann, Steven D.
APPLICANT: Furtak, Katarzyna
APPLICANT: Furtak, Katarzyna
APPLICANT: Alsobrook II, John P.
APPLICANT: Lepley, Denise M.
APPLICANT: Lepley, Denise M.
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids
FILE REFERENCE: 21402-258
; CURRENT APPLICATION NUMBER: US/10/072,012
; PRIOR APPLICATION NUMBER: 60/265,102
; PRIOR APPLICATION NUMBER: 60/265,514
```

Encoding

```
RESULT 18
US-10-072-012-258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-072-012-256
                                                                                                                    Sequence 258, Application No. US20 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 1391
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 256
                                                                             APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 394;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                    APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 60/266,975
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILING DATE: 2001-02-08
  APPLICANT:
                          APPLICANT:
                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DR APPLICATION NUMBER: 60/266,406

RR FILING DATE: 2001-02-02

RR FILING DATE: 60/266,767

RR FILING DATE: 2001-02-05

DR APPLICATION NUMBER: 60/267,057

RR FILING DATE: 2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 2001-01-31
APPLICATION NUMBER: 60/265,395
FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 2001-01-31
APPLICATION NUMBER: 60/265,517
FILING DATE: 2001-01-31
APPLICATION NUMBER: 60/265,412
                                                                                                                                                                                                                                        632
                                                                                                                                                                                                                                                                    587
                                                                                                                                                                                                                                                                                             572
                                                                                                                                                                                                                                                                                                                       527
                                                                                                                                                                                                                                                                                                                                                512
                                                                                                                                                                                                                                                                                                                                                                            467
                                                                                                                                                                                                                                                                                                                                                                                                     452
                                                                                                                                                                                                                                                                                                                                                                                                                               407
                                                                                                                                                                                                                                                                                                                                                                                                                                                          392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       287
                                                                                                                                                                                                                 647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               272 RFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKLLHLEKPNEPVPAVSEGGQ
                                                                                          Tchernev, Velizar
Spytek, Kimberly
                                                                                                                                                                                                                 FGES IMSENRSREELGKVGSQSSFSGSMEI IEVS
                                                                                                                                                                                                                                FGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                   IYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSWHEESPFEKQFKRRSCQME
                                                                                                                                                                                                                                                                                                                         NYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSLTSSWYFATESSHFYSASA
                                                                                                                                                                                                                                                                                                                                       NYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSLTSSWYFATESSHFYSASA
                                                                                                                                                                                                                                                                                                                                                                            SEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSGTAQRSLLSPLHRSGSVED
                                                                                                                                                                                                                                                                                                                                                                                             SEQTPETS PDKEEAS I PKKLQTARPSDSQSKRLHS VRTSSSGTAQRSLLSPLHRSGSVED
                                                                                                                                                                                                                                                                                                                                                                                                                                 DSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPSTTLDGTNKLCQFSPVQEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                DSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPSTTLDGTNKLCQFSPVQEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLEDSPLVQALSGLHLSADRLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            KSETPLSPPCADSATSEAAGORPVHPASVPSVPSVPSLLEDSPLVQALSGLHLSADRLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RFVKEKRPTI SPNFNFLGQLLDYEKKI KNQTGASGPKSKLKLLHLEKPNBPVPAVSEGGQ
Gangolli, I
Padigaru, P
Anderson, I
                                                                                                                                                                                                                                                                   IYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSWHEESPFEKQFKRRSCQME
                                                   Patturajan, Meera
Shimkets, Richard
                                         Li, Li
                                                                               Zerhusen, Bryan
                                                                                                                                  Application US/10072012 o. US20040033493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  59.2%; bred. No.
100.0%; Pred. No.
ive 0; Mismatches
                                                                                                          Velizar
 Esha
Muralidhara
David W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 15;
                                                                                                                                                                                                                                           665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 680;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                                                                                                                                                                                                                                                                                                                  571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       346
                                                                                                                                                                                                                                                                                                631
                                                                                                                                                                                                                                                                                                                         586
                                                                                                                                                                                                                                                                                                                                                                                                                                 466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               391
                                                                                                                                                                                                                                                                      646
                                                                                                                                                                                                                                                                                                                                                                              526
                                                                                                                                                                                                                                                                                                                                                                                                       511
                                                                                                                                                                                                                                                                                                                                                                                                                                                          451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                          밁
                                                                 Ş
                                                                                              밁
                                                                                                                     Ş
                                                                                                                                                 片
                                                                                                                                                                          á
                                                                                                                                                                                                      밁
                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                 ; ORGANISM: Homo sapiens US-10-072-012-258
                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: Pat
SEQ ID NO 258
LENGTH: 662
                                                                                                                                                                                                                                                                                                                       Query Match
Best Local (
                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
                                                                                                                                                                                                                                                                                                           Local Similarity
hes 304; Conserv
                                          599
                                                                   602
                                                                                              539
                                                                                                                        542
                                                                                                                                                  479
                                                                                                                                                                           482
                                                                                                                                                                                                      419
                                                                                                                                                                                                                                                          359
                662
                                                                                                                                                                                                                                422
                                                                                                                                                                                                                                                                                   362
  IEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rastelli, Luca
                665
```

```
APPLICANT: Alsobrook II, John P.
APPLICANT: Lepley, Denies M.
APPLICANT: Reger, Daniel K.
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Enc
FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,767
PRIOR FILING DATE: 2001-02-02
PRIOR PILING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR PILING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: 60/267,459 FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Colman, Steven D.
Wolenc, Adam R.
Pena, Carol E. A
Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P.
                                                                                                                                                                                                                                                                                                                                                                                                           SSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SVPSVQPS1LEDSPLVQALSG1H1SADRLEDSNKLKRSFS1DIKSVSYSASMAASLHGFS
                                   KPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEI
                                                                                                                                                       DILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQ
                                                                                                                                                                                                                                                                                 KRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTXSAGLGLKGWHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFS
KPSDRADSRRSWHEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSMEI
                                                                                                                          DILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQ
                                                                                                                                                                                                                                              KRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHS
                                                                                                                                                                                                                                                                                                                                                                        SSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gerlach, Valerie
Taupier Jr, Raymond
Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      45.7%; So ilarity 100.0%; I Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Charles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 304; DB 15; I ; Pred. No. 1.4e-278; 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Encoding Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 662;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                661
         658
                                                                                                                             598
                                                                                                                                                                                       601
                                                                                                                                                                                                                                                       538
                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                              478
                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     418
```

밁

659

IEVS

```
; TYPE: PRT; ORGANISM: Homo sapiens US-10-108-260A-4872
                                                                                                                                                                                                                                                                                                                                RESULT 20
US-10-108-260A-4872
                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 19
US-10-296-115-1259
                                                                                                                      Sequence 4872, Application US/10108260A
publication No. US20040005560A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20040005560A1e1 full length cDNA
FILE REFERENCE: H1-A0106
CURRENT APPLICATION NUMBER: US/10/108,260A
CURRENT FILING DATE: 2002-03-27
NUMBER OF SEQ ID NOS: 5458
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 4872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 2000-04-25
NUMBER OF SEQ ID NOS: 1478
SEQ ID NO 1259
LENTH: 672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 1259, Application US/10296115
Publication No. US20040053248A1
GENERAL INFORMATION:
APPLICANT: Hyseq Inc
TITLE OF INVENTION: No. US20040053248A1el Nucleic Acids and Polypeptides
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Homo sapiens
PEATURE:
NAME/KEY: misc_feature
LOCATION: (1)...(672)
OTHER INFORMATION: Xaa = a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PILE REFERENCE: 784PCT
CURRENT APPLICATION NUMBER: US/10/296,115
CURRENT FILING DATE: 2002-11-18
PRIOR APPLICATION NUMBER: US09/488,725
PRIOR PILING DATE: 2000-01-21
PRIOR APPLICATION NUMBER: US09/552,317
                                                                                                            ENGTH: 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                381
                                                                                                                                                                                                                                                                                                                                                                                                          441
                                                                                                                                                                                                                                                                                                                                                                                                                                          434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                314 LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVPSVQPSLLED 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    254 IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                               TTLDGTNKLCQFSPVQEL 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                        TTLDGTNKLCQFSPVQEL 458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             38.8%;
 22.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      any amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 258; DB 15;
Pred. No. 5e-235;
0; Mismatches 0;
Score 152; DB 15;
Pred. No. 4.6e-135;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        or other as shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Table
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0
```

밁 Ś B

APPLICANT:

APPLICANT: APPLICANT:

Gangolli, Esha Padigaru, Muralidhara Anderson, David W. Anstelli, Luca

Gerlach, Va. Taupier Jr,

Miller, Charles E.

APPLICANT:

Shimkets, Richard

Ś

```
; LENGTH: 155
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-964-277-7
                                                                                                                                       RESULT 22
US-10-072-012-682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-964-277-7
                                                          GENERAL INFORMATION:
APPLICANT: Tchernev, Velizar
                                                                                                  Sequence 682, Application US/10072012 Publication No. US20040033493A1
                                                                                                                                                                                                                                                                                                                                                                                   Query Match 16.2%; Score 108; DB 9; 18est Local Similarity 100.0%; Pred. No. 1.3e-93; Matches 108; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 7, Application US/09964277 Patent No. US20020137170A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/964,277
CURRENT FILING DATE: 2001-09-25
NUMBER OF SEQ ID NOS: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Luche, Ralf M. APPLICANT: Wei, Bo
    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE FILE REFERENCE: 200125.434
                                           APPLICANT:
                                                                                                                                                                                                                                                                                                   194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                 254 IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQ 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             473
                                                                                                                                                                                                                        108 IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQ 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        413 MAASLHGFSSSEDALEYYKPSTTLDGTNKLCQPSPVQELSEQTPETSPDKEEASIPKKLQ 472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  252;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MAASLHGFSSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TARPSDSQSKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSA 532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GLGLKGWHSDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SSFSGSMEIIEVS 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SSFSGSMEIIEVS 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QVYSVRRRQKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QVYSVRRRQKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQ 652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GLGLKGWHSDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TARPSDSQSKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSISQQHLTKSA
                  Spytek, Kimberly
Zerhusen, Bryan
    Patturajan,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
Meera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ŗ
                                                                                                                                                                                                                                                                                                                                                                                                                            Length 155;
                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                     ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>,,</u>
                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            592
                                                                                                                                                                                                                                                                                                        107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     6
                                                                                                                                                                                                                                                                                                                                                                                     0
```

밁 ঠ 밁 Ś 밁 ঠ 문 S 밁

```
US-10-072-012-683
                                                                                                                                                                                                                                                                                                                                                                                           RESULT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; LENGTH: 660
; TYPE: PRT
; ORGANISM: Mus musculus
US-10-072-012-682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR FILING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILING DATE: 2001-02-08
PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                               Sequence 683, Application US/10072012 Publication No. US20040033493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
Matches 67; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 60/265,517
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-02-02
PRIOR PILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR FILING DATE: 2001-02-05
PRIOR FILING DATE: 2001-02-05
                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Pa
SEQ ID NO 682
                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                              APPLICANT: Tchernev, Velizar APPLICANT: Spytek, Kimberly
                                                                                                                                                                                                             APPLICANT:
                                                                                               APPLICANT
                                                                                                                                                                                                                                  APPLICANT:
                                                                          PPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Remaining Prior Application data removed - See File Wrapper or NUMBER OF SEQ ID NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/10/072,012 CURRENT FILING DATE: 2002-01-31 PRIOR APPLICATION NUMBER: 60/265,102 PRIOR FILING DATE: 2001-01-30 PRIOR APPLICATION NUMBER: 60/265,514 PRIOR FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Pena, Carol E. A
APPLICANT: Furtak, Katarzyna
APPLICANT: Grosse, William M.
APPLICANT: Alsobrook II, John P.
APPLICANT: Lepley, Denise M.
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgees, Catherine B.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       75 HKVDIDC 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             75 нкурірс ві
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15 LVALLESGTEKVLLIDSRÞFVEYNTSHILEAININCSKLMKRRLQQDKVLITELIQHSAK 74
         Gangolli, Esha
Padigaru, Muralidhara
Anderson, David W.
Rastelli, Luca
Miller, Charles E.
Gerlach, Valerie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PatentIn Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LVALLESGTEKVILIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELIQHSAK 74
                                                                                                                                                                            Shimkets, Richard
                                                                                                                                                                                                   Zerhusen, Bryan
Patturajan, Meen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ilarity 100.0%; F
Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gusev, Vladimir Y.
                                                                                                                                                                                                      Meera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              10.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 67; DB 15;
; Pred. No. 3.2e-54;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 660;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                    RESULT 24
US-09-764-853-578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                     Patent No. US20020090672A1

GENERAL INFORMATION:
APPLICANT: ROSen et al.
TITLE OF INVENTION: Nucleic Acide, Proteins,
FILE REFERENCE: PUZO6
CURRENT APPLICATION NUMBER: US/09/764,853
CURRENT FILING DATE: 2001-01-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-072-012-683
Prior application data removed -
NUMBER OF SEQ ID NOS: 939
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 578
LENGTH: 88
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR FILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-01-31
PRIOR FILING DATE: 2001-01-31
PRIOR PILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,495
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR PILING DATE: 2001-02-07
PRIOR FILLING DATE: 2001-02-07
PRIOR FILLING DATE: 2001-02-07
PRIOR FILLING DATE: 2001-02-07
PRIOR PILLING DATE: 2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 1391
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 683
LENGTH: 677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Leple
APPLICANT: Riege
APPLICANT: Burge
TITLE OF INVENTIC
FILE REFERENCE: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 6
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/267,459 PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    114 SFNSVHLLAGGFÁEFSRCFÞÓLCEGKSTLVÞTCISQÞCLÞVANIGÞTRILÞNLYLGCQRD 173
                                                                                                                                                                                                                                                                                                                                                                                                          174 VLNK 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                  174 VLNK 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            114 SFNSVHLLAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRD 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    INVENTION: Proteins and Nucleic Acids Encoding Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lepley, Denise M.
Rieger, Daniel K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Taupier Jr, Raymond Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9.6%; Score 64; DB 15; ilarity 100.0%; Pred. No. 2.2e-51; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Colman, Steven D. Wolenc, Adam R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Catherine E
                                                                                                 consult PALM or file wrapper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ٩.
                                                                                                                                                                                            and Antibodies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 677;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
```

밁 8 문 8

ç,

-

This Page Blank (uspto)

```
-MODEL=frame+ p2n.model -DEV=xlp
-Q=/cgn2 1/USPTO spool p/US10029345/runat 09022005 091324 26455/app query.fasta_1.839
-Q=/cgn2 1/USPTO spool p/US10029345/runat 09022005 091324 26455/app query.fasta_1.839
-DB=PublIshed_Applications NA -QFMT=fastap -SUPFIX=olipo.Trnpb -MINMATCH=0.1
-LOOPEL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MAXTRIX=oligo
-TRANS=human40.cdi -LIST=1000 -DOCALIGN=200 -THR SCORE=quality -THR MIN=75
-ALIGN=50 -MODE=LOCAL -OUTEMT=pto -NORM=ext +HBAPSIZB=500 -MINLEN=0
-MAXLEN=2000000000 -USER=US10029345 @CGN 1 1 723 @runat 09022005 091324 26455
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=60 -XGAPEXT=60
-FGAPEXT=7 -YGAPOP=60 -YGAPEXT=60 -DELDY=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Word size:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Post-processing: Listing first 1000 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         OLIGO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Xgapop 60.0 , Xgapext 60.0
Ygapop 60.0 , Ygapext 60.0
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0
                 Published_Applications_NA: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5378673 seqs, 2950229984 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               February 14, 2005, 13:42:21; Search time 845 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-029-345A-109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MAHEMIGTQIVTERLVALLE.....LGKVGSQSSFSGSMEIIEVS 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Copyright
/cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US05_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US05_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US05_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US05_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US05_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US05_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US05_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US05_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US05_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US105_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                             cgn2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (without alignments)
4643.557 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                39
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

	0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
	Score 4772 4772 4772 4772 4772 4772 4772 477	
	MARCH 71.00	3
	Length 1998 1998 2102 2702 2732 2733 3496 33544 3544 3544 3544 3544 3544 3544 35	
	DB 17 17 17 17 17 17 17 17 17 17 17 17 17	
ALIGNMENTS	ID Comparison	
	Sequence 3, Appli Sequence 27, Appli Sequence 27, Appli Sequence 27, Appli Sequence 20, Appli Sequence 1, Appli Sequence 1, Appli Sequence 21, Appli Sequence 25, Appli Sequence 25, Appli Sequence 25, Appli Sequence 26314, Appli Sequence 20314, Appli Sequence 2015, Appli Sequence 2015, Appli Sequence 2016, Appli Sequence 2016, Appli Sequence 2016, Appli Sequence 2017, Appli Sequence 2018, Appli Sequence 2018, Appli Sequence 21071, Appli Sequence 21071, Appli Sequence 21071, Appli Sequence 21071, Appli Sequence 21071, Appli Sequence 2665, Appli Sequence 2675, Appli Sequence 27145, Appli Se	

* B & B &	8 8 8 8	B & B &	Q Db	Q B Q 8	P & B &	B & B	& B &	B & B	ON PO ON PO	ery M
300 sm 899 AC0 320 sm 959 AT0	90 1	59 40 19	40 GC		61 41	241 TGC 101 Asp 301 GAC	61 Asp 181 GAC		1 1 2	6 6
snGlnThrGlyA CCAGACTGGAG snGluProValP: 	Argme	39—c 0—c	AGAAA Proc	eLeu CTT	AlaGlyGlyF	AGTCA AGTCA CYSPI	AspLysValLeuI GACAAAGTGTTAA	 GGAACGGAAA 	AlaHisGlum	70. 9
	ArgmecAspwecSsrieu		TIGGT	ProAsnLeuTyrLe	LeuAlaGlyGlyPheAlaGluPhe	TTGTP	leThrGluLe	AGTGGAACGGAAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATA AGTGGAACGGAAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAAATA HISII eLeuGluAlaI leAsmI leAsmCysSerLysLeuMetLysArgAT	A US-US-US-US-US-US-US-US-US-US-US-US-US-U	98*
Jysserlyst AAGAGCAAAC GluGlyGlyG GAGGGTGGAC	Serleunspolualatyrargenev	ABPRICE COCCACA	INTEREST AND TO THE PROPERTY OF THE PROPERTY O	rLeuGlyCysGlnArgAs; TCTTGGCTGCCAGCGAGA	SerArg	GTTTACGATCAAAGCTCCCA LeuLeuGlyLySLeuGluLy	uIleGlnHis CATCCAGCAT	AATTGATAGO	rGlnileVal	Indels: Gaps:
TCAAGCTGCT TCAAGCTGCT TLnLysSerG1 THI	YIAIGENEVA ACAGATTIGT ACAGATTIGT euLeuAspTY TCCTGGACTA			ArgAspValLo	CysPheProGlyLeuCys	TCCCAAGATGTT GluLysSerPhe	SerAlaLysH: CAGCGAAAC!		ThrGluArgLe	10081
SIGINTINTGLYALASSETGLYFTOLYSSETLYSLEGUS HEUGENLYSELEGUS HEUGENLYSELEGUS HEUGENLYSELEGUS HEUGENLYSELEGUS HEUGENLYSELEGUS HEUGENLYSELEGUS HEUGENLYSELEGUS HEUGENLY HEUGENLY HEUGEN				lLeuAsnLysGlul CCTCAACAAGGAG	CysPheProGlyLeuCysGluGlyLysSer	TCTCTC SerVal	LeuileThrGluLeuileGlnHisSerAlaLysHisLysValAspileAsp 	SCCGGCCATTTGTGGAATACAATACATCC SCCGGCCATTTGTGGAATACAATACATCC TrLysLeuMetLysArgArgLeuGlnGln	MetAlaHisGluMetileGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu	
P 340 C 101			י אי אי ט				NIleAsp 80 ATTGAT 240	 aCAATACATCC 120 rgLeuGlnGln 60 	LeuGlu 20 CTGGAA 60	
œ										
Db 1 RESULT 2 US-10-377; Sequence; Publicat; GENERAL;	Q D Q D	장 음 장 음	8 B 8 B	Q B Q	, yo da	Q	\$ \$ \$	\$ \$ \$	70 gg VQ	Qy Bb
1979 1979 1972- 1927,		39 00 99	1619 AC 560 la 1679 CC 580 er	20 59 40	39	1319 AC 460 ro 1379 CT 480 ln		39		340 ro
1979 AAATCATTGAGGTCTC -072-27 e 27, Application US, tion No. US200400095C	AAAAGCAGTTTAAACGCAAAGCTGCCAAATGGAATTTTGGAGAGAGCATCATGTCAGAGA	CTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGC CTGCLLYSProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG	ACTOGGATIATICTIGGCCCCCAGACCTCTACCCCTT LCCCTGACCAGCAGGAGGATATICTAGGAGGATATICTGGCCCCCCAGACCTCTACCCCTT LCCCTGACCAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG	lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH		ACAAGCTAIGCAGTICTCCCCTGITCAGGAACTAILGGAACAGACTAGACTAGACTAGACTAGACTAGACTAGAC	Reserversers in AspAraLedicium y in Inches in Section In the Graphic Inches in Section In Inches in Section In Inches in Section In Inches in Inches in Section In Inches in Section In Inches in Inches in Section In Inches in	TCAGTGGGCTGCACCTGTCCGCAGACAGCCTGGAAGACAGCAACAAGACAACAACAACAACAACAACAACA	alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL	roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV
TCTCC 1995 US/1037707 09501A1	hacccagaacc	SCAGCCAGCTG	RGGCCCCCAC	erGlnGlnHis 		WHISSETVal	nPheSerPro	CCTGTCCGCA	:0SerValGln	rAlaThrSer TGCTACCTCA
_เ	TgʻcʻahAiʻgʻa LysValGlyS AAAGTGGGCA	cccactroco	ACCICIACCO ACCICIACCO SerAlaSerA TCTGCCTCAG	LeuThrLyss CTCACGAAGT	 AGAACCAGCAV AGAACCAGCAV SerValGluAV AGCGTGGAGG	BroLysLysL CCCAAGAAGC	GAATACTACA ValGlnGluL	GACAGGCIGG	ProSerLeuLe CCGTCGCTGTT	GluAlaAlaG gaGGCAGCAG
	AATTIGAGA erGlnSerSe grcagictag	GAGACCAAGTO rgSerTrpHi GGAGCTGGCAT	Cliccience laileTyrGly CCATCTACGGI	erAlaGlyLeu :::::::::::::::::::::::::::	 CAGTGGCACO PABNTYrHis CAATTACCAO	erSerGlyTh	accttccact	AAGACAGCAAI CAGCATGGCA	;uG1uAspSer :AGAGGACAGC	lyGlnArgPro ACAAAGGCCC
	jadcarcardi PheserGlys TTTTCGGGCA	TATTCTGTGC	AGCAGCIGGE GlySerAlaS GGCAGTGCCA TyrSerValA	G YLeuLysG GCCTTAAGG SerSerTrpT		ArgProSerA AGGCCTTCAG	ACTCTGGATG	AAGCICAAGC	ProLeuValG	ValHisProA GTGCATCCCG
	cagadi ermeto 3CATGO	GCAGG	erTyrs	TPhe	CCTT	pSer CAGO	GACC	TGGC NGGC	InAla	LaSes

```
APPLICANT: Rudolph-Owen, Larra A.
APPLICANT: Chun, Miyoung
APPLICANT: Tasi, Fong-Ying
APPLICANT: Tasi, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: NOVEL 25869, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: NOVEL 25869, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: NAD USES THEREFOR
FILE REFERENCE: MPI03-0180MNIM
CURRENT APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/815,419
                                                                                                                                                                                                                                                                                                                                                                                                                  SOPTWARE: PASTSEQ FOR WIT
SEQ ID NO 27
LENGTH: 1998
TYPE: DNA
ORGANISM: Homo Sapiens
PEATURE:
NAME/KEY: CDS
LOCATION: (1)...(1998)
US-10-377-072-27
                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                        ঠ
                                                                                                                                                               Ş
                                                                                                                                                                                                  밁
                밁
                                                                           밁
                                                                                                       δ
                                                                                                                                       밁
                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                              US-10-029-345A-109 (1-665) x US-10-377-072-27 (1-1998)
                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                            Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Millennium Pharmaceuticals
APPLICANT: Curtie, Rory A.J.
APPLICANT: Logan, Thomas Joseph
APPLICANT: Glucksmann, Maria A.
APPLICANT: Meyers, Rachel E.
APPLICANT: Williamson, Mark J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Remaining Prior A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 2001-03-22
                181
                                                                          121
                                           61
                                                                                                        41
                                                                                                                                       61
                                                                                                                                                                 21
                                                                                                                                                                                                                                   بر
                                 AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                           H18IleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                         SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                  ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                    MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                           CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                       AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application data removed - D NOS: 114 Eq for Windows Version 4.0
                                                                                                                                                                                                                                                                                              472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           See File Wrapper or PALM.
                                                                                                                                                                                                                                                                                              0440
                                             80
                                                                                                        60
                                                                                                                                       120
                                                                                                                                                                     40
                                                                                                                                                                                                  60
                                                                          180
                                                                                                                                                                                                                               20
                                                      δ
                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                               S
                      닭
                                                                                   . B
                                                                                                               Ś
                                                                                                                                             밁
                                                                                                                                                                                                                 뮍
                                                                                                                                                                                                                                   . 5
                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                     1139
                              1259
                                                                                           1199
                                                                                                                                                                                                                   1079
                                                                                                                                                                                                                                                                              1019
                                                           420
                                                                                                                       400
                                                                                                                                                                                    380
                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                           340
440 snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                                          959
                                                                                                                                                                                                                                                                                                                                                                       320
                                                                                                                                                                                                                                                                                                                                                                                                       899
                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                    alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                                                                                                                                                                                                                                                             snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA
                                             heSerSerSluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                           TCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCT
                                                                                                          heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP
                                                                                                                                                                                                                                                                             CCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCCGTGCATCCCGGCCAGCG
                                                                                                                                                                                                                                                                                              roCygAlaAgpSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV
                                                                                                                                                                                                                                                                                                                                                                                                                       snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                 TGCCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGC
                                                                                                                                                                                                                                                                                                                                           ATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  -GlnGlnAsnGlyI1eGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             460
                                                           440
                                                                                                                                                     1198
                              1318
                                                                                           1258
                                                                                                                        420
                                                                                                                                                                                    400
                                                                                                                                                                                                                   1138
                                                                                                                                                                                                                                                 380
                                                                                                                                                                                                                                                                                1078
                                                                                                                                                                                                                                                                                                                                                                                                                                       320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                          1018
                                                                                                                                                                                                                                                                                                                                                                        340
                                                                                                                                                                                                                                                                                                                                                                                                         958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               100
```

S В Ś 밁 Ś 밁 5 뭐

560

```
GENERAL INFORMATION:

APPLICANT: Millennium Pharmaceuticals Inc.

APPLICANT: Curtis, Rory A.J.

APPLICANT: Logan, Thomas Joseph
APPLICANT: Glucksmann, Maria A.

APPLICANT: Meyers, Rachel E.

APPLICANT: Williamson, Mark J.

APPLICANT: Rudolph-Owen, Laura A.

APPLICANT: Rudolph-Owen, Laura A.

APPLICANT: Tsai, Fong-Ying

TITLE OF INVENTION: NOVEL 25669, 25934, 26335, 5036;

TITLE OF INVENTION: AND USES THEREFOR

CURRENT APPLICATION NOWBER: US/10/377,072

FRIOR APPLICATION NUMBER: US 09/895,860

PRIOR APPLICATION NUMBER: US 09/895,860

PRIOR APPLICATION NUMBER: US 60/215,370

PRIOR APPLICATION NUMBER: US 69/23,806

PRIOR APPLICATION NUMBER: US 69/23,806

PRIOR APPLICATION NUMBER: US 69/723,806

PRIOR APPLICATION NUMBER: US 69/723,806
                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 3
US-10-377-072-27
                                                                                                                                                                                                                                                                                                                                                                              Sequence 27, Application US/10377072 Publication No. US20040157221A9 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1499
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1439
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          luIleIleGluValSer 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ĠĠĊĀĠĀĀĠĊĊĀĀĠŦĠĀĊĀĠĀĠĊŦĠĀĊŦĊĠĊĠĠĊĠĠĀĠĊŦĠĠĊĀŦĠĀĀĠĀĠĀĠĊĊĊĊŦŦŦĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 creccrácaderecadeciaderececacrrecedadadaceaadreratrecededeciade 1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ccacadadrocroacacrretacrerececroadecareracedadecadrecadridecadriacr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TATCTCCACTGCATCGAAGTGGGAGGGTGGAGGACAATTACCACACCAGCTTCCTTTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGCAGTGGCACCGCCCAGAGGTCCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ĊŦĠĀŦĀĀĠĠĀĠĠĀĀĠĊĊĀĠĊĀŦĊĊĊĊĀĀĠĀĀĠĊŦĠĊĀĠĀĊĊĠĊĊĀĠĠĊĊŦŦĊĀĠĀĊĀĠĊĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1995
                                                                                                                                                                                    , 50365, 21
39, 49937,
                                                                                                                                                                             21117,
7, 49931 AND 49933 MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Remaining Prior Application data removed - Sel NUMBER OF SEQ ID NOS: 114

SOFTWARE: FASTSEQ for Windows Version 4.0

ENOTH: 1998

TYPE: DNA

ORGANISM: Homo Sapiens
FAATURE:
NAME/KEY: CDS
LOCATION: (1)...(1998)

US-10-377-072-27
                                                문
                                                                        5
                                                                                                               밁
                                                                                                                                      S
                                                                                                                                                                            밁
                                                                                                                                                                                                       S
                                                                                                                                                                                                                                           멹
                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                         뭐
                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-029-345A-109 (1-665) x US-10-377-072-27 (1-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR PILING DATE: 2000-03-07
PRIOR PILING DATE: 2001-04-25
PRIOR PILING DATE: 2001-04-25
PRIOR PILING DATE: 2001-04-25
PRIOR PILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR PILING DATE: 2001-05-19
PRIOR APPLICATION NUMBER: US 09/815,494
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR FILING DATE: 2001-03-23
PRIOR FILING DATE: 2001-03-23
PRIOR FILING DATE: 2001-03-22
                                                481
                                                                                                              421
                                                                                                                                           141
                                                                                                                                                                            361
                                                                                                                                                                                                         121
                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                         41 HisīleLeuGluAlaīleAsnīleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ш
-GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP
                                                 ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                              ACTCTAGTCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160
                                                                                                                                                                               LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140
                                                                                                                                                                                                                          GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAGAGGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                               AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120
                                                                                                                                                          CTTGCAGGTGGGTTTGCTGAGTTCTCTTGTTTCCCTTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                          récaéricaéaaégriféraéfritaceardaaaecricecaaéaferrécerérererea
                                                                                                                                                                                                                                                                                                             GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                       CACATTTTGGAAGCCÁTTAATÁTCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTGGĀĀCGGĀĀĀĀĀGTGCTGCTĀĀTTGĀTĀGCCGGCCĀTTTGTGGĀĀTĀCĀĀTĀCĀTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Arodeceardadardarriedaacreaaarrierracreadaderregregereicideaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         See File Wrapper or
                                                                                                480
                                                                                                                                                            420
                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                          300
```

240 80 180 60 120 40 60

밁 Ś 뭐 Ś В Ś 밁 Ś 문 S 밁 Ś 뭐 Ş B

1979

660

1919

640

1859

Ś

밁

밁

음 중

DB:	540 isserAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA 560
Percent Similarity: Best Local Similarity:	1559 GCCTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCCTGGCCTGGGCCTTAAGGGCTGGC 1618
Alignment Scores: Pred. No.:	TATCTCCACTGCATCGAAGTGGGAGGGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCG
	euSerProLeuHisArgSerGlySerValGluAgpAsnTyrHisThrSerPheLeuPheG
; LENGTH: 2102 ; TYPE: DNA	
	480 lnSerLysArgLeuHisSerValArgThrSerSerGlyThrAlaGlnArgSerLeuL 500
; PRIOR APPLICATION N ; PRIOR FILING DATE: ; NUMBER OF SEQ ID NO	460 roAapLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAapSerG 480
; PRIOR APPLICATION I ; PRIOR FILING DATE:	ACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGGAAACCAGTC
; CURRENT APPLICATION ; CURRENT FILING DATE	440 snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP 460
; APPLICANT: NAGAHA ; APPLICANT: MASUHO ; TITLE OF INVENTION ; TITLE OF INVENTION	420 nesersersersilaepalaleugilityriyrlygbroserthrintleuaepglythra 440
	TCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCT
	heSerLeuAspIleLysSerValSerTyrSerAlaSerWetAlaAlaSerLeuHisGlyP
; APPLICANT: NAGAI, ; APPLICANT: NAGAI,	1139 TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT 1198
; APPLICANT: ISONO, YOU APPLICANT: OFFICE APPLIC	380 euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP 400
	alProSerValProSerValGlnProSerLeuLeuGluAsoSerProLeuValGlnAlaL
; APPLICANT: ISOGAI, ; APPLICANT: OTSUKI	340 FOLYBALANBISERALBINISERGILMIBALBGIYYJINATGPIOVALHIBETOALBSERV 360
GENERAL INFORMATION	
S-10-094-749-673; Sequence 673; Applic	320
RESULT 4	ALCHANCIAN TO AND A CHANANA AND AND AND AND AND AND AND AND AN
Db 1979 AAATCATT	CONTROL OF THE CONTRO
Qy 660 luileil	CIATATCTCCAAACTTCAATTTTCTGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA
1919	hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA
	779 TGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAAAAAA
1950	260 etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT 280
Ov 620 luLvsGl	719 TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCA 778
Db 1799 GGCAGAAA	240 alleuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM 260
1739	659 TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTG 718
Oy 580 erAlaTyi	220 euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV 240
Db 1679 CCACAGAC	599 TINICCCCGAGICICATITCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT 658
Qy 560 laThrGlu	GENGENERATIGEN FINANCIA CHARACTER CARACTER CONTRACTOR C
Db 1619 ACTCGGA	

8 8 8 8

밁

১ 🖁 ১

음 성

음 중

 음 성 음

र्

음 성

5

음 성

유 성

유성

밁

8 & 8

```
, YURI
VICA, KAORU
AI, KEIICHI
E; RYOTARO
ECHIKA, I CHIRO
ECHIKA, I CHIRO
I, NAOHIKO
I, NAOHIKO
HIKAWA, TSUTOMU
UKA, MOTOYUKI
NIKAWA, TSUTOMU
UHO, YASUHIKO
HIONI NOVEL FULL-LENGTH CDNA
108435/0160
1010 NUMBER: US/10/094,749
DATE: 2002-03-12
ON NUMBER: 60/350,435
TE: 2002-01-24
ON NUMBER: JP 2001-328381
TE: 2001-09-14
D NOS: 3381
D NOS: 3381
D NOS: 3381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YAMA, TOMOYASU
KI, TETSUJI
KI, TETSUJI
MATSU, AI
MATSU, AI
MATSU, AI
MATSU, AI
MATSU, AI
MATSU, AI
MATSU, AI
MATSU, AI
MATSU, AI
MATSU, AI
MATSU, AI
MATSU, AI
MATSU, AI
MATSU, AI
MATSU, AI
MATSU, AI
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
MATSU
                                                                             ິ
                                                                                                                                                                                                                                                                                                                             apiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   erArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   cation US/10094749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGAGGTCTCC 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGCCAAGTGACAGAGCTGACTCGCGGCGGGGGCTGGCATGAAGAGAGCCCCCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /sProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /rSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       .eGluValSer 665
       0
472.00
99.10%
99.10%
70.98%
Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
       2102
662
0
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             580
```

90 V2 V3	?	}	, B &	}	당 상	P &	D 43	}	}	}	5 8 5	}	} B &	P 64	₽ \$	од Оу Оу	
ASIGUAPOVALPROALAVALSERGIUGIYGIYGINLYSSERGIUTHIPPOLEUSERPRO 339	00 AsnGlnThre	280 Thri	33	ω 0	LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCys 	200 PheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIle 219 	e-GIn	36 (This	16			6 1	41 HisileLeuGluAlaileAsnileAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60 	21 SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40	029-345) 1 56	
		_															
RESULT 5 US-10-168-506-2 IS-90-10-168-506-2 Sequence 2, Application US/10168506 Publication No. US20040053229A1 GENERAL INFORMATION: APPLICANT: PLOWMAN, GREGORY D. APPLICANT: MARTINEZ, RICARDO APPLICANT: WHYTE, DAVID		N O			580 SerAlaTyrSerCygSerGinLeuBroThrCygGlyAspGlnValTyrSerValArgArg 		Qy 540 HisSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPhe 559	20 GlyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrp 	⊢ თ	Qy 480 GlnSerLy8ArgLeuHisSerValArgThrSerSerGerGlyThrAlaGlnArgSerLeu 499	460 1433		7—0 4 4	20 11 11 11 11 11 11 11 11 11 11 11 11 11		Qy 360 ValProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAla 379 	

유 왕

8 8 8 8 8

```
APPLICANT: MANNING, GERANU
APPLICANT: SUDARSANAM, SUCHA
APPLICANT: HILL, RON
APPLICANT: FLANAGAN, PETER
ITILE OF INVENTION: MAMMALIAN PROTEIN PHOSPHATASES
FILE REFERENCE: 038602/1351
CURRENT APPLICATION NUMBER: US/10/168,506
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR PILING DATE: 2000-12-21
NUMBER OF SEQ ID NOS: 76
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 2
LENGTH: 2732
TYPE: DNA
ORGANISM: Homo sapiens
US-10-168-506-2
                                                                                                                                        밁
                                                                                                                                                                    S
                                                                                                                                                                                                    밁
                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                           명
                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
    Ś
                              멍
                                                      S
                                                                                        문
                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-029-345A-109 (1-665) x US-10-168-506-2 (1-2732)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              No.:
                                                                                                                                              1018
                                1136
                                                                                        1077
                                                                                                                  181
                                                                                                                                                                         161
                                                                                                                                                                                                    958
                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                            898
                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                   838
     220
                                                                                                                                                                                                                                                                                                                                               101
                                                                                                                                                                                                                                                                                                                                                                           778
                                                                                                                                                                                                                                                                                                                                                                                                                                  718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       538
                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ۳
                                                                                                                                                                                                                                                                                                                 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspLysValleuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hi8IleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerGlyThrGluLygValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
    euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                               heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                              ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                      ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                           LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                           CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                      GCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT
                                                                                                                                              CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT- 1076
                                                                                                                                                                                                    ACTOTAGTOCOTACOTGCATTTOTCAGCOTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                  GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                              TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT
                                                                                                     -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                            TTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ÷
                                1195
                                                                                        1135
                                                                                                                                                                                                    1017
                                                                                                                                                                                                                                                                                     140
                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                               160
                                                                                                                                                                                                                                                           957
                                                                                                                                                                                                                                                                                                                   897
                                                                                                                                                                                                                                                                                                                                                                           837
                                                                                                                                                                                                                                                                                                                                                                                                     100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       597
                                                                                                                                                                                                                                                                                                                                                                                                                                  777
                                                                                                                                                                                                                                                                                                                                                                                                                                                           80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           40
                S
                                      밁
                                                                      S
                                                                                                                        S
                                                                                                                                                                                                                                     5
                                                                                                   밁
                                                                                                                                                     片
                                                                                                                                                                                 S
                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        よ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                           2096
                                                                                                                                                                                                                  2036
                                                                                                                                                                                                                                                                                                                                1916
                                                                                                                                                                                                                                                                                                                                                                                                                                              1796
                                                                                                                                                                                                                                                                        1976
                                                                                                                                                                                                                                                                                                                                                                                        1856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1196 TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAAGCCTCCAATGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1256 Tretagrecaeretragereggarerecegerecegearegeraregeracarea
                   580
                                                                                                                               540
                                                                                                                                                                                                                                            500
                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                          460
                                                                                                                                                                                                                                                                                                                                                                                                                  440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           280
erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                               laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                          euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                          heSerSerSluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                               CCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT
                                                                                                     ACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTG
                                                                                                                       1sSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                                                                                  TATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCACCAGCTTCCTTTTCG
                                                                                                                                                                                                                                                                                       InSerLygArgLeuHisSerValArgThrSerSerGtyThrAlaG1nArgSerLeuL
                                                                                                                                                                                                                                                                                                                                CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACTGCCAGGCCTTCAGACAGCC
                                                                                                                                                                                                                                                                                                                                               roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                        ACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                      snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCCCAGCGTGCCCAGCGTCGCTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACCAGACTGGAGCATCAGGGCCAAAGAGCCAAACTCAAGCTGCCACCTGGAGAAGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAATTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCG
                                                                                                                               560
                                               2275
                                                                          580
                                                                                                     2215
                                                                                                                                                           2155
                                                                                                                                                                                       540
                                                                                                                                                                                                                  2095
                                                                                                                                                                                                                                              520
                                                                                                                                                                                                                                                                        2035
                                                                                                                                                                                                                                                                                                                                1975
                                                                                                                                                                                                                                                                                                                                                                                        1915
                                                                                                                                                                                                                                                                                                                                                                                                                                              1855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1255
                                                                                                                                                                                                                                                                                                    500
                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                  460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           260
```

	18 7 24	Qy 36 GluTyrAsnThrSerHisileLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLys 55	Qy 16 ValAlaLeuLeuGluSerGlyThrGluLyBValLeuLeuIleAspSerArgProPheVal 35	17 Gaps: Gaps: Gaps: Pred. No.: 0 Length: 2966 Score: 472.00 Matches: 648 Percent Similarity: 99.39% Conservative: 0 Best Local Similarity: 99.39% Mismatches: 2 Ouery Match. 70.00% Mismatches: 2	INFORMA 115-520	FEATURE: NAME/KEY: misc feature LOCATION: (1)(2966)	; SEQ ID NO 520 ; LENGTH: 2966 ; TYPE: DNA ; ORGANIEM: Homo sanions	PRIOR FILING DATE: 2000-01-21 PRIOR PELICATION NUMBER: US09/552,317 PRIOR FILING DATE: 2000-04-25 NUMBER OF SEO ID NOS. 1470	; FILE REFERENCE: 784PCT; FILE REFERENCE: 784PCT; CURRENT APPLICATION NUMBER: US/10/296,115; CURRENT FILING DATE: 2002-11-18; PRIOR APPLICATION NUMBER: US/10/408 726		ESULT 6 S-10-296-115-520 Sequence 520 Application WG/1020611	Qy 660 lullelleGluValser 665	heSerGlySerMetG	640	N	Db 2276 CTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGC 2335	
																	
& B &	Q	8 8 8	D Q	Db Qy	B & 8	ş 8	B &	B &	p 69	B &	B 성	B 성	ት	B &	d	8 B	St.
			375 roLeuValGlnAlaLeuSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnL 395 	355 alHisProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAspSerP 375	335 hrProLeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProV 355	15	31	275 yBGluLyBArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrg 295 	255 lailealaTyrileMetLygArgMetAspMetSerLeuAspGluAlaTyrArgPheVall 275 	235 laSerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleA 255 	215 heCysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysA 235 	195 YBProLyBProAspPheIleProGluSerHiBPheLeuArgValProValAsnAspSerP 215 	176 ABNLYBGluLeuIle-GlnGlnABNGlyIleGlyTyrValLeuABNAlaSerTyr-ThrC 195 			Ω	116 AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeu 135

Pred. No.: 0	RESULT 7 US-10-257-026-1 Sequence 1, Application US/10257026 Publication No. US20040086859A1 GENERAL INFORMATION: New dual specificity phosphatase FILE OF INVENTION: New dual specificity phosphatase FILE REFERENCE: DUSP10KDWS CURRENT APPLICATION NUMBER: US/10/257,026 CURRENT FILING DATE: 2003-11-07 NUMBER OF SEQ ID NOS: 3 SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 1 LENGTH: 3059 TYPE: DNA ORGANISM: Homo sapiens FRATURE: NAME/KEY: CDS LCOATION: (127)(2121) US-10-257-026-1	Db 1446 GCCCTTCAGACAGCCAGAGCAACCATTCCATTCCGTCAGAACCAGCAGCACCGGCACCG 1505 Qy 495 laGlnArgSerLeuLeuSerProLeuHisArgSerGlySerValGluAspAsmTyrHisT 515 1506 CCCAGAGCTCCTTTTATCTCCACCTGCATCCAGAACCAGCAGCAGCAGCAGTGCAACTACCACA 1565 Qy 515 hrSerBheleuPheGlyLeuSerThrSerGlnGnHisLeuThrLySerAlGyLeuG 535 1566 CCAGCTTCCTTTTCGGCCTTTCACCCAGCCAGCACCTCAAGAACTAGCAACTACCACA 1565 Qy 515 lyLeuLySGLyTrpHisSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrS 555 1866 CCAGCTTCATTTCGACCTGCATACCACCCAGCACCTCAGCACTCACCACCTCTGCCTGACCAC Qy 515 lyLeuLySGLyTrpHisSerAspIleLeuAlaProGlnThrSerThrProSerLaIleTyrGlyG 575 1866 GCCTTAAGGCCTGGCACTCCGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCA 1685 Qy 516 lillillillillillillillillillillillillil
. B Q B Q B Q	8 8 8 8 8 8 8 8 8 8	8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8
320 snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP 340	725 TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAATGACGATTTTTGTGAGAAAATTTT 784 220 euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsmGlyCysV 240 785 TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCCTTCCAATGGATGTG 844 240 alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM 260 845 TTCTAGTGCACTGTTTAGGTGGAGATCTCCCGCCCCCCCC	ThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn

```
Sequence 20. Application US/09964277

Patent No. US20020137170A1

GENERAL INFORMATION:

APPLICANT: Luche, Ralf M.

APPLICANT: Wei, Bo

TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHOREMATE PLICATION UNMBER: US/09/964,277

CURRENT APPLICATION UNMBER: US/09/964,277

CURRENT FILING DATE: 2001-09-25

NUMBER OF SEQ ID NOS: 22

SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                            RESULT 8
US-09-964-277-20
                                                                                                                                                                                                                                                                                                                                                           2045
                                                                                                                                                                                                                                                                                                                                                                                                                                    1985
                                                                                                                                                                                                                                                                                 2105 AAATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1685
                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                                                                                                 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          440
                                                                                                                                                                                                                                                                                                       luIleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                   snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                      GGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       crecciacaecrecaecrececaecreeceaegaeaeceaecrerarrecereceeee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TATCTCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGAGCAAGCGÁTTGCÁTTCGGTCAGAÁCCAGCÁGCAGTGGCÁCCGCCCAGAGGTCCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | InSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACAAGCTATGCCAGTTCTCCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTC 1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCA 1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          heSerSerSluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                lerige are central de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compara de la compa
                                                                                                                                                                                                                                                                                 2121
                                                                                                                                                                                                                                                                                                                    665
                                                                                                               PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                          2044
                                                                                                                                                                                                                                                                                                                                                                                                                                                           640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       400
                                           문
           S
                                                                          Ş
                                                                                                                   밁
                                                                                                                                                Ś
                                                                                                                                                                                         뫄
                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; SEQ ID NO 20
; LENGTH: 3332
; TYPE: DNA
; ORGANISM: Homo &
US-09-964-277-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-029-345A-109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores: Pred. No.:
                                                                                                                                                                                           1637
                                                                                                                                                                                                                                                                                                                                          1517
                                                                                                                                                                                                                                                                    1577
                                                                                                                                                                                                                                                                                                                                                                                                                    1457
                                                                                                                     1697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1157
           474
                                                                                454
                                                                                                                                                        434
                                                                                                                                                                                                                                414
                                                                                                                                                                                                                                                                                                                                                                               374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                       354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    194
AlaArgProSerAspSerGlnSerLysArgLeuHisSerValArgThrSerSerSerGly
                                                            GlnThrProGluThrSerProAspLysGluGluAlaSerIleProLysLysLeuGlnThr
                                                                                                           AsnLysLeuLysArgSerPheSerLeuAspIleLysSerValSerTyrSerAlaSerMet 413
                                                                                                                                                                                                                                                                                                                                                      SerProLeuValGlnAlaLeuSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSer 393
                                                                                                                                                                                                                                                                                                                                  AGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGG
                                                                                                                                                                                                                                                                                                                                                                                                        cccarachreceichaecaracechaecaracechaecarachaecareaerrachaeane
                                                                                                                                                                                                                                                                                                                                                                                                                              ProValHisProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGACGCCCTCAGTCCACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GluThrProLeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuHisLeuGluLysProAsnGluProValProAlaValSerGluGlyGlyGlnLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGCACCTGGAGAAGCCAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATGAGAAGAAGAATTAAGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VallysGluLysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TyrGluLysLysI1eLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeu 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IleAlaIleAlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysAlaSerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SerPheCysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGGCTGGGATCTCCCGGCTCCGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCTTTTGTGAGAAATTTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ThrCysProLysProAspPheIleProGluSerHisPheLeuArgValProValAsnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (1-665) x US-09-964-277-20 (1-3332)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
472.00
100.00%
100.00%
70.98%
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3332
472
0
0
 493
                                     1816
                                                                                                             1756
                                                                                                                                                                                 1696
                                                                                                                                                                                                                                                            1636
                                                                                                                                                453
                                                                                                                                                                                                                       433
                                                                                                                                                                                                                                                                                                                                  1576
                                                                                                                                                                                                                                                                                                                                                                                                        1516
                                                                                                                                                                                                                                                                                                                                                                                                                                              373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                233
```

밁 ঠ 뮰 S 밁 Ş B Ś 밁 ঠ 밁 S 당 Ś 밁 S 당 Ş 밁 δ 밁 Ş 밁 S 밁 S 멍 Ś 밁 δ

Pred. No.: 3496 Score: 472.00 Matches: 663 Percent Similarity: 99.40% Conservative: 0 Best Local Similarity: 99.40% Mismatches: 2 Query Match: 70.98% Indels: 4 DB: 9 Gaps: 0 US-10-029-345A-109 (1-665) x US-09-964-277-1 (1-3496) Oy 1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu 20	CF SEQ ID NOS E: FastSEQ fo: IO 1 I: 3496 DNA DNA SM: Homo sapi	GENERAL INFORMATION: APPLICANT: Luche, Ralf M. APPLICANT: Wei, Bo PITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE FILE REFERENCE: 200125, 434 CURRENT APPLICATION NUMBER: US/09/964,277 CURRENT FILING DATE: 2001-09-25	RESULT 9 US-09-964-277-1 ; Sequence 1, Application US/09964277 ; Patent No. US20020137170A1	Qy 654 SerPheSerGlySerMetGluIleIleGluValSer 665	Oy 634 GluSerIleMetSerGluAsnArgSerArgGluGluLeuGlyLysValGlySerGlnSer 653	Oy 614 HisGluGluSerProPheGluLysGlnPheLysArgArgSerCysGlnMetGluPheGly 633	Qy 594 ValTyrSerValArgArgArgGlnLysProSerAspArgAlaAspSerArgArgSerTrp 613	OY 574 GlyGlySerAlaSerTyrSerAlaTyrSerCygSerGlnLeuProThrCygGlyAspGln 593	Oy 554 ThrSerSerTrpTyrPheAlaThrGluSerSerHisPheTyrSerAlaSerAlaIleTyr 573	Qy 534 LeuGlyLeuLy8GlyTrpHisSerAspIleLeuAlaProGlnThrSerThrProSerLeu 553	Qy 514 HisThrSerPheLeuPheGlyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGly 533	Qy 494 ThralaGlnArgSerLeuLeuSerProLeuHisArgSerGlySerValGluAspAsnTyr 513	Db 1817 GCCAGGCCTTCAGACAGCCAGCCAGCCAGCAGCAGCAGCAGCAGCAGCAG
. & & & & & & & & & & & & & & & & & & &	0y 0y 0b	D Q D Q	B &	B &	B 8	B &	B &	B &	S S	β δ	B &	β δ	ρb
320 snGluprovaleroAlavalSerGluGlyGlyGlnLysSerGluThrProLeuSerProP 340	280 hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLyslleLysA 300	240 alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIIeAlaTyrIleM 260	220 euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV 240 	200 heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL 220 	181 -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP 200 	161 ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180 	141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160 	121 LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140 	101 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120 	81 CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100 	61 ABPLYSVAILEUIIEThrGluLeUIIEGInHisSerAlaLySHisLySValABPIIeABP 80	41 HislleLeuGluAlaileAsnileAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60 	

```
RESULT 10

US-10-370-715B-261

Sequence 261, Application US/10370715B

Publication No. US20040258678A1

GENERAL INFORMATION:

Patin Docket Preview
APPLICANT: BODARY, SARAH C.
APPLICANT: HONTE
APPLICANT: BEISBLL, HUNTE
APPLICANT: BRISBELL, HUNTE
APPLICANT: WISHELD, JILL R.
APPLICANT: WILLIAMS, P. MICKEY
APPLICANT: WULLIAMS, P. MICKEY
APPLICANT: WOOD, MILLIAMS D.

APPLICANT: WU, THOMAS D.

TITLE OF INVENTION: Compositions and Met
                                                                                                                                                                       2480
                                                                                                                                       2540
                                                                                                                                                                                                                                      2360
                                                                                                                                                                                                                                                                      2300
                                                                                                                                                                                                                                                                                                      2240
                                                                                                                                                                                      640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1940
                                                                                                                                                                                                                      620
                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                     560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      440
                                                                                                                                             luIleIleGluValSer
|||||||||||||
                                                                                                                                     AAATCATTGAGGTCTCC
                                                                                                                                                                           snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                 luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA
                                                                                                                                                                                                                                          rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                         erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                1yLeuSerThrSerG1nG1nH1sLeuThrLysSerA1aG1yLeuG1yLeuLysG1yTrpH
                                                                                                                                                                                                                                                                                                                                                                                                lnSerLysArgLeuH1sSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                      2556
                                                                                                                                                     665
    Methods
    for
  the
                                                                                                                                                                 2539
                                                                                                                                                                                 660
                                                                                                                                                                                                 2479
                                                                                                                                                                                                                640
                                                                                                                                                                                                                                2419
                                                                                                                                                                                                                                                 620
                                                                                                                                                                                                                                                                                                 2299
                                                                                                                                                                                                                                                                                                                                2239
                                                                                                                                                                                                                                                                                                                                                                                                                520
                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                 2119
                                                                                                                                                                                                                                                                                                                                                                                                                                2059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1819
                   S
                                      뮹
                                                  Ś
                                                                      뭐
                                                                                  S
                                                                                                  밁
                                                                                                                   5
                                                                                                                                       뭕
                                                                                                                                                   5
                                                                                                                                                                      문
                                                                                                                                                                                    S
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-029-345A-109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               No.:
                                      1222
                                                                      1162
                                                                                                      1103
                                                                                                                                       1044
                                                                                                                       181
                                                                                                                                                      161
                                                                                                                                                                       984
                                                                                                                                                                                      141
                                                                                                                                                                                                       924
                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                      864
                                                                                                                                                                                                                                                      101
                                                                                                                                                                                                                                                                      804
                                                                                                                                                                                                                                                                                                      744
                                                                                                                                                                                                                                                                                                                                       684
                                                                                                                                                                                                                                                                                                                                                                       624
                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                      41
                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
472.00
99.40%
99.40%
70.98%
18
```

밁 S 당 S ф δ 밁 S 밁 Ś 밁 S 밁 Ś 밁 Ś 밁 ð 밁 Ş 망 S 뮍 S 밁 ঠ 吊 Ş

1221

220

1102

1043 160

140 983

120 923

863 100 803

743 60 683 40 623

```
; TITLE OF INVENTION: Related Diseases
; FILE REFERENCE: P1948R1-US
; CURRENT APPLICATION NUMBER: US/10/370,71:
; CURRENT FILING DATE: 2003-02-21
; NUMBER OF SEQ ID NOS: 742
; SEQ ID NO 261
; LENGTH: 3521
; TYPE: DNA
; ORGANISM: Homo sapien
US-10-370-7158-261
alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                      ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                         heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                                                     CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT-
                                                                                                                                                                                                                                                                                                  ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                    GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                     AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CysSerGlnLysValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HislleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (1-665) x US-10-370-715B-261 (1-3521)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3521
663
0
2
4
```

640	620 luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerTleMetSerGluA
620 2421	600 rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
600 2361	580 erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
580 2301	60 laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
560 2241	540 isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
540 2181	20 lyLeuSerThrSerGlnGlnHißLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH
520 2121	500 euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
500 2061	480 lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
480 2001	460 rohsplysGluGluAlaSerIleProLysLysLeuGlnThrhlalaArgProSerAspSerG
460 1941	440 snlysleuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
440 1881	420 heSerSerSerGluabpalaLeuGluTyrTyrLyBProSerThrThrLeuAspGlyThrA
420 1821	400 heSerLeuAspileLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP
400 1761	laabpargleuGluaspSerasmlysLeulysargSerP
380 1701	360 alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL.
360 1641	40 rocysalaaspSeralaThrSerGlualaalaGlyGlnargProValHisProAlaSerV
340 1581	20 gnGluProValProAlaValSerGluGlyGlyGlnLygSerGluThrProLeuSerProP
320 1521	300 snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA
300 1461	280 hrīleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA
280 1401	260 etLybärgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLybArgProT

Ś

밁 ঠ 문 ঠ 밁 S 밁 ঠ 밁 S 밁 S 문 S 밁 S

S 문 S 밁 δ 당 ঠ 밁 ঠ 밁 \$ 밁 ঠ 밁 S 밁 र् 밁 S 닭

```
; TYPE: DNA
; ORGANISM: Homo sapi
; PEATURE:
; PEATURE:
; NAME/KEY: CDS
; LOCATION: (589)...(
US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 1, Application US/09816494
PATENT NO. US20020034807A1
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DU.
TITLE OF INVENTION: 9HOSPHATASE MOLECULES AND FILE REFERENCE: 10448-030002
CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
FRIOR APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 1
LENGTH: 3544
                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 11
US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
 밁
                  ঠ
                                                밁
                                                                  · 5 B
                                                                                                                    S
                                                                                                                                                  뭐
                                                                                                                                                                     ક
                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                            US-10-029-345A-109 (1-665) x US-09-816-494-1 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                                           Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2542
                                                  889
                                                                                                    829
                                                                                                                                                                                                                                                           649
                                                                                                                                                                                                                                                                                                            589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   640
 949
                        121
                                                                          101
                                                                                                                                                    769
                                                                                                                                                                                                       709
                                                                                                                          81
                                                                                                                                                                             61
                                                                                                                                                                                                                                41
                                                                                                                                                                                                                                                                                 21
LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140
                                                                                                                                                                                                                                                                                                           MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGCTTTTTCGGGCAGCATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HisīleLeuGluAlaīleAsnīleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     luIleIleGluValSer 665
                                                                AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                        CACATTITGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                         AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                        SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                    GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                    CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                     GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                   AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (2583)
                                                                                                                                                                                                                                                                                                                                                                                      0
472.00
99.40%
99.40%
70.98%
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2558
                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DUAL SPECIFICITY AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                      0 663
2 0 63
4 4
  1008
                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2481
                                                    948
                                                                                                    888
                                                                                                                            100
                                                                                                                                                       828
                                                                                                                                                                                                        768
                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                           708
                                                                                                                                                                                                                                                                                   40
                                                                                                                                                                                                                                                                                                            648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                80
```

360 166 380 380 172 172 178 440 178 440 1966 446 1966 446 1966 446 1966 446 1966 446 1966 460 1966 460 1966 460 1966 460 1966 460 1966 1966 1966 1966 1966 1966 1966 19	141 ThrLeuValProThrCysTleSergInProCysLeuProValAlasmIleGlyProThr 160
APPLICA BRIOR FI PRIOR FI	Db OY OY OY OY OY OY OY OY OY O
	Db 2087 TATCTC Qy 520 1yLeus Db 2147 GCCTTT Qy 540 issert Qy 540 issert CCACAG Qy 560 laThrG Db 2267 CCACAG Qy 580 erAlaT Db 2327 CTGCCTT Qy 600 rgGlnL Db 2387 GGCAGA Qy 620 luLysc; Db 2447 AAAAGGG QY 640 snArgsc Db 2567 ACAGGTC QY 640 lullell Db 2567 AAATCAI RESULT 12 US-10-377-072-25 F Sequence 25, Applic
hh. 25934, 26: 08; 16816, 308, 16816, 371,072 7,072 7,23,806 7,23,806 7,245 7,455 7,859,860 7,455 7,859,860 7,863,297 7,99,801 861,801 861,801	
135, 50365, 21 16839, 49937,	 AGGACAATTI Y8SerAlaG:
, 21117, 37, 49931	
AND 49933	
MOLECULES	DH 540 DH 540 DH 540 DH 560 RG 2266 RG 2266 RG 2266 RG 2266 RG 2266 RG 2266 RG 2266 RG 2266 RG 2266 RG 2266 RG 2266 RG 2266

Ś 밁

밁 S 밁 Ś Ъ S В S 닭 Ś 밁 ð 片

Ś

Ś 문 Ś 뭐 S 밁 Ś 밁 Ş В Ś В Ş В S 皮 8 뮹 8

```
Alignment Scores:
Pred. No.:
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR FILING DATE: 2001-03-22
Remaining Prior Application data removed - S
NUMBER OF SEQ ID NOS: 114
SOPTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 25
LENGTH: 3544
TYPE: DNA
ORGANISM: Homo Sapiens
PEATURE:
NAME/KEY: CDS
LOCATION: (589)...(2586)
                                                                                                                                                                                                                                            ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
DB:
 S
             밁
                                     8
                                                              밁
                                                                            र्
                                                                                               밁
                                                                                                                     5
                                                                                                                                            밁
                                                                                                                                                             S
                                                                                                                                                                                   밁
                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-029-345A-109 (1-665) x US-10-377-072-25 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-377-072-25
                                                                                                                                                                                      1009
                     1247
                                                                                                      1128
                                                                                                                                               1069
                                                               1187
                                                                                  200
                                                                                                                          181
                                                                                                                                                                  161
                                                                                                                                                                                                          141
                                                                                                                                                                                                                              949
                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                      889
  240
                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                               829
                                                                                                                                                                                                                                                                                                                                                        769
                                                                                                                                                                                                                                                                                                                                                                                                                                        649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 589
                                                                                                                                                                                                                                                                                                                                                                                                 709
                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                        heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                             ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                               ThrLeuValProThrCygIleSerGlnProCygLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                          LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                      CysSerGlnLysValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                   AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                           H18IleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                                                                                       GCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT
                                                                                                                                             CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT- 1127
                                                                                                                                                                                                                                                                                                                                                        GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                      TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAAGCCTCCAATGGATGTG
                                                               TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT
                                                                                                                   -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP
                                                                                                                                                                                                                              CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   •
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   File
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wrapper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                              1246
                      1306
                                                                                                      1186
                                                                                                                                                                   180
                                                                                                                                                                                      1068
                                                                                                                                                                                                                              1008
                                                                                                                                                                                                                                                   140
                                                                                                                                                                                                           160
                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                   100
                                                                                                                                                                                                                                                                                                                                                        828
                                                                                                                                                                                                                                                                                                                                                                                                 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                            40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 648
                                                                                                                                                                                                                                                                       948
                                                                                                                                                                                                                                                                                                                                                                            8
                          밁
                                               & 4 · 8
                                                                                                          밁
                                                                                                                            Ş
                                                                                                                                                                     Ś
                                                                                                                                                                                               밁
                                                                                                                                                                                                             성 유
                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        名 品
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ద
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                        2027
                                                                                                                                                                                                                                                                                                                                                                                                          1787
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1427
                                                                                                                                                                                                                                                                                 1967
                                                                                                                                                                                                                                                                                                                          1907
                                                                                                                                                                                                                                                                                                                                                                  1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1487
                                                                                                                                                                            520
                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                     460
                                                                                                                                                                                                                                                                                                                                              440
                                                                                                                                                                                                                                                                                                                                                                                                                              400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     340
                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                          hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA
rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                             erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                               isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                       TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCA
                                 CTGCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGC
                                                                                      laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                                         AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTT
                                                                                                                                                                                                                                                    lnSerLy8ArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                           roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                 heSerSerGluAepAlaLeuGluTyrTyrLy8ProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                             euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACCAGACTGGAGCATCAGGGCCAAAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                             540
             620
                                 2386
                                                                          2326
                                                                                              580
                                                                                                                2266
                                                                                                                                     560
                                                                                                                                                         2206
                                                                                                                                                                                                 2146
                                                                                                                                                                                                                                          2086
                                                                                                                                                                                                                                                                                   2026
                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                          1966
                                                                                                                                                                                                                                                                                                                                                                   1906
                                                                                                                                                                                                                                                                                                                                                                                       440
                                                                                                                                                                                                                                                                                                                                                                                                           1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                   1786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1366
                                                                                                                                                                                                                      520
                                                                                                                                                                                                                                                             500
                                                                                                                                                                                                                                                                                                                                              460
                                                                                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         280
```

밁

```
GENERAL INFORMATION:
APPLICANT: MILIENTUM PHARMAGEUTICALS INC.
APPLICANT: CULTIS, ROLY, A.J.
APPLICANT: CULTIS, ROLY, A.J.
APPLICANT: CULTIS, ROLY, A.J.
APPLICANT: CULTIS, ROLY, A.J.
APPLICANT: CULTIS, ROLY, A.J.
APPLICANT: CULTIS, ROLY, A.J.
APPLICANT: CULTIS, ROLY, A.J.
APPLICANT: CULTIS, ROLY, MARY J.
APPLICANT: CULTIS, ROLY, MARY J.
APPLICANT: CULTIS, ROLY, MARY J.
APPLICANT: CULTIS, ROLY, MARY J.
APPLICANT: CULTIS, ROLY, MARY J.
APPLICANT: CULTIS, MONEY, ASSOC, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: ADDRESS THEREONE,
TILE ROLY, MARY J.
APPLICANT: CULTIS, ASSOC, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: ADDRESS THEREONE,
TILE OF INVENTION: ADDRESS THEREONE,
TILE OF INVENTION: ADDRESS THEREONE,
TILE ROLY, MARY J.
CURRENT FILING DATE: 2001-02-27
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2000-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2000-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR FILING 
                                                      Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                    US-10-377-072-25
                                                                                                                                                           Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 25, Ap
Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               luileIleGluValSer
|||||||||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAATCATTGAGGTCTCC 2583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A CA G T CA C G G G A A G C T G G G G A A A G T G G G C A G T C T A G C T T T T C G G G C A G C A T G G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             aaaagcagrittaaacgcagaagcrigccaaarggaarttggagagagagcarcatgricagaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GECAGAAGCCAAGTGACAGAGCTGACTCGCGGGGGAGCTGGCATGAAGAGAGCCCCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/10377072 to. US20040157221A9
                                               0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             665
                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                  3544
663
0
2
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2446
                                                                                      밁
                                                                                                                           Ś
                                                                                                                                                                        밁
                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-029-345A-109 (1-665) x US-10-377-072-25 (1-3544)
                                                                                                                                                                        1487
                                                                                                                                                                                                                                                             1427
                                             340
                                                                                                                                                                                                                                                                                                                                               1367
                                                                                                                                                                                                                                                                                                                                                                                                                                 1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1187
                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                    280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1009
                                                                                                                                                                                                                                                                                                                                                                                      260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21
Arganictrerecerecrererendades de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya del companya de la companya de la companya de la companya de la companya de la companya de la companya del companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya del companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya del companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya de la companya del la companya del la companya del la companya del la companya del la companya del la companya del la companya del la 
                                                                                             snGluProValProAlaValSerGluGlyGlyGlyGlnLysSerGluThrProLeuSerProP 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA
                                                                                                                                                                                                                                                                 hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA
                                                                                                                                                                                                                                                                                                                          alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rrarccccaagrerearricerecererereraareacagerriceaaaaaarri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gcaścagaargggarraggraargragargaggaa-raccrerccaagcra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspp 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGAATTCTTCCCAATCTTTATCTTCGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT- 1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ThrieuValProThrCysIleSerGlnProCysLeuProValAlaAsmIleGlyProThr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAGAGGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  tigca grická a kad a transká a transká a transká a transká a transká a transká a transká a transká a transká a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp|
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTGGAÁCGGAÁAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAÁTÁCAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerGlyThrGluLy8ValLeuLeuIlcAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                          1486
                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                             1426
                                                                                                                                                                                                                                                                                                                                                                                                               1366
                                                                                                                                                                                                                                                                                                                                                                      280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1246
                                                                                                                                                                                                                                                                                                                                                                                                                                                          260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               648
```

With

```
RESULT 14
US-10-425-114-26234
US-10-425-114-26234, Application US/10425114; Sequence 26234, Application US/10425114; Publication No. US20040034888A1; GENERAL INFORMATION:
; APPLICANT: Liu, Jingdong; APPLICANT: Zhou, Yihua
                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                         밁
                                                                                                                            ঠ
                                                                                                                                                       밁
                                                                                                                                                                          Ş
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         श्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                   2327
                                                                                                                                                                                                                                                                                                                                                                       2267
                                                                                                                                                                                                                                                                                                                                                                                                                          2207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1607
                                                                                                                                                           2507
                                                                                                                                                                                                              2447
                                                                                                                                                                                                                                                                 2387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                    640
                                                                                                                                                                                                                                       620
                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                               560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                       luIleIleGluValSer
                                                                                                                                                                         snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                             luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA
                                                                                                                                                                                                                                                                                                                  18SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLlysGlyTrpH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP
                                                                                                                                                                                                               GGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTG
                                                                                                                                                                                                                                                                                 rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                                                       CCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT
                                                                                                                                                                                                                                                                                                                                                                                           laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGCGCCACCGCCCCAGAGGTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGCACAAAGGCCCGTGCATCCCGCCAGCG
                                                                                                         AAATCATTGAGGTCTCC
                                                                                                         2583
                                                                                                                                  665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1846
                                                                                                                                                             2566
                                                                                                                                                                                                               2506
                                                                                                                                                                                                                                                                 2446
                                                                                                                                                                                                                                                                                                                   2386
                                                                                                                                                                                                                                                                                                                                                                       2326
                                                                                                                                                                                                                                                                                                                                                                                                                          2266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1726
                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                    560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          400
                                                                                                                                                                                                                                                                                           620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; FEATURE:
; OTHER INFORMATION:
US-10-425-114-26234
                    문
                                               S
                                                                             밁
                                                                                                S
                                                                                                                           밁
                                                                                                                                                       S
                                                                                                                                                                                    밁
                                                                                                                                                                                                     S
                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-029-345A-109 (1-665) x US-10-425-114-26234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Kovalic, David K.
APPLICANT: Screen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21 (53313) B
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 26234
LENGTH: 3625
TYDD: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    No.:
                                                                                                                                                                                                                                         1052
                                                                                                         181
                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                           992
                                                                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                                                                                 872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     752
                                                                                                                                                                                                                                                                                                                                                                       81
                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21
                                                                                                                                HisīleLeuGluAlaīleAsnīleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                     LeuAlaGlyGlyPheAlaGluPheSerArgCy8PheProGlyLeuCy8GluGlyLy8Ser
                                                                                                                                                                                                                                                                                                                                                                                                                AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
    euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                          heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                 GCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT
                                                                                                -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP
                                                                                                                                                                                    AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerGlyThrGluLy8ValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Clone
                                                                                                                                                                                                                                         TGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ID:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LIB4119-028-H6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (1-3625)
```

240

1289

220

1230

1111

140 1051 120 991 100 80 871 811 40 751

6

6	2370 CCACAGAGTCCTCACACTTCTÁCTCTÁCTCTÁGCTCTÁCGÁGCCÁGTCÁGGCÁGTCÁGT
P = =	
; FEATURE: ; NAME/KEY; misc_feature ; OTHER INFORMATION: Incyte I US-10-343-357-17	
17 3766 A : Homo	
; PRIOR APPLICATION NUMBER: US ; PRIOR FILING DATE: 2000-09-0 ; NUMBER OF SEQ ID NOS: 20 ; SOFTWARE: PERL Program	480 lnSerLysArgLeuHisSerValArgThrSerSerGlyThrAlaGlnArgSerLeuL 500
; FRIOR APPLICATION NUMBER: US ; PRIOR FILING DATE: 2000-08-3; ; PRIOR APPLICATION NUMBER: US ; PRIOR FILING DATE: 2000-08-3	460 roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG 480
; PRIOR APPLICATION NUMBER: US ; PRIOR FILING DATE: 2000-08-C ; PRIOR APPLICATION NUMBER: US ; PRIOR FILING DATE: 2000-08-T	440 snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP 460
; PRIOR APPLICATION NUMBER: PO ; PRIOR FILING DATE: 2001-07: ; PRIOR APPLICATION NUMBER: US ; PRIOR FILING DATE: 2000-07-2	420 heSerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA 440
; TITLE OF INVENTION: PROTEIN ; FILE REFERENCE: PI-0173 PCT; ; CURRENT APPLICATION NUMBER: ; CURRENT FILING DATE: 2003-	400 heSerLeußsplleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP 420
; APPLICANT: GRIFFIN, Jennif, ; APPLICANT: YUE, Henry, WARI ; APPLICANT: NGUYEN, Danniel ; APPLICANT: KEARNEY, Liam	380 euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP 400
WANG, Yu GANDHI, LEB, Ern LU, Dyun	360 alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL 380
; GENERAL INFORMATION; ; APPLICANT: INCYTE GENOMICS, ; APPLICANT: ELLIOTT, Vicki ; APPLICANT: YAO, Monique G.	340 roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV 360
RESULT 15 US-10-343-357-17 ; Sequence 17, Application US/ ; Publication No. US2004005834	320 sngluproValproAlaValSergluglyGlyGlyglyglaLysSergluThrproLeuSerprop 340
Qy 660 lullelleGluValse	300 snglnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA 320
640 2610	280 hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA 300
Qy 620 luLysGlnPheLysAı Db 2550 AAAAGCAGTTTAAACY	260 etlysärgmetäspmetserLeuaspGlualaTyrärgPheVallysGluLysärgProT 280
Qy 600 rgGlnLysProSerA	240 alleuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM 260
Db 2430 CTGCCTACAGCTGCA	

Ś

x US-10-343-357-17 (1-3766)

8 8 8 8 8 8 8

B 8

음 성

음 성 음

중 음 성

음 성 음

8 8 8

음 성 음

경 음 경

음 성 음 성

```
MBER: US 60/221,679
000-07-28
MBER: US 60/223,272
000-08-03
MBER: US 60/224,309
000-08-10
MBER: US 60/226,728
000-08-18
000-08-18
US 60/229,254
000-08-30
MBER: US 60/231,366
000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ENOMICS, INC.; TANG, Y.Tom
, Vicki S.; RAMKUMAR, Jayalaxmi
nique G.; BURFORD, Neil
umei E.; STEWART, Elizabeth A.
Ameena R.; ARVIZU, Chandra S.
nestine A.; HAFALIA, April J.A.
ng Aina M.; TRIBOULEY, Catherine M.
, Jennifer A.; BAUGHN, Mariah R.
nry; WARREN, Bridget A.
nry; WARREN, Bridget A.
Liam
                                                                                                                                                                                                                                                                                                                                                                                                                             PROTEIN PHOSPHATASES
173 PCT
173 PCT
NUMBER: US/10/343,357
2003-01-28
MBER: PCT/US01/23716
001-07-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                   e
Cyte ID No. US20040058341A1 7480570CB1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               on US/10343357
0058341A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 edreree 2686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          uValSer 665
||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ĠĠĀĀĠĀĠĊĪĠĠĠĠĀĀĀĠĪĠĠĠĊĀĠĪĊĀĠŢĊĪĀĠĊĬŤĬŢĬĊĠĠĠĊĀĠĊĀŢĠĠ 2669
Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2549
```

BRG1UProValProAlaValSerG1UG1YG1YG1NIYSSErG1UThrProLeuSerProP 340	0 hrileSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA	alleuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM 	200 heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL 220	161 ArgileLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180	121 LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140	81 CysSerGinLysValValVyrAspGinSerSerGinAspValAlaSerLeuSerSer 100	41 HisileLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60	1 MetalaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu 20
RESULT 16 US-10-648-593-115 ; Sequence 115, Application US/10648593 ; Dublication No. US20040106132A1 ; Publication No. US20040106132A1 ; Publication No. US20040106132A1 ; PAPLICANT: Bristol-Myers Squibb Company ; APPLICANT: Bristol-Myers Squibb Company ; TITLE OF INVENTION: IDENTIFICATION OF GENES FOR PREDICTING ACTIVITY OF COMPOUNDS TO TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR ; TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS ; FILE REFERENCE: D0273 NP	Qy 640 snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG 660	600 rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpH4.sGluGluSerProPheG	Cy 560 Idinibulses being being being as being a serial and the specific serial and the specific serial and the specific serial and the specific serial and the specific serial and the specific serial	2096 GCCTTTCCACCAGCAGCACCACCAGCAGCTCTGCTGGCCTGGGCCTTAAGGGCTGGC 540 isSerAspileLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA [1976	1856 ACAAGCTATGCCAGTTCTCCCCTGTTCAGAACTATCGGAGCAGACTCCCGAAACCAGTC 460 roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG 1916 CTGATAAGGAGGAACCAGCATCCCCAAGAACCTGCCAGACCAGCC 1916 CTGATAAGGAGGAACCAGCCATCCCCAAGAAGCTGCAGACCAGCCCTTCAGACAGCC	400 hoSerleuAspileLysSerValSerTyrSerAlaSsrMetAlaAlaSsrLeuBisGlyP	

8 8 8 8 8 8 8 8 8 8 8

음 성

ठ

8 8 8 8 8 8

8 8 8 8 8 8 8

유성

유정

음 중 음

ঠ

음 성

1	CCGCCACCATCGCTATCGCCTACATCA 961	Db 902 TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTA
TSerCysSerGlnLeuProThrcysGlyA.	ILIVyBAlalyBAlaBSerAsmGlyCysV 240	842 240
1862	/alasnAspSerPheCysGluLysIleL 220 	782 TTZ
1802	laSerTyr-ThrCysProLysProAspP 200 	GCAGC
520 lyLeuSerThrSerGlnGlnHisLeuThrLyBSerAlaGlyLeuGlyLeuLyBGlyTrpH 	nArgAspValLeuAsnLysGluLeuIle 180 CGAGATGTCCTCAACAAGGAGCTGAT- 722	161
QY 500 euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG 520	SLeuProValAlaAsnIleGlyProThr 160 CTTACCTGTTGCCAACATTGGGCCAACC 663	604
	"BPheProGlyLeuCyBGluGlyLyBSer 140 TTTCCTGGCCTCTGTGAAGGAAAATCC 603	544
16	uGluLysSerPheAsnSerValHisLeu 120 	101 AspC 484 GACT
	erGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100 	81 CYBS
Qy 420 heSerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA 440	'8ValLeulleThrGluLeulleGlnHisSeralaLysHisLysValAspIleAsp 80 	364 GACA
1382	1 ELEUGIDA ATTLABENTI EABECYSSERLYSLEUMETLYSARGARGLEUGINGIN 60 	304 CAC
1322	erArgProPheValGluTyrAsmThrSer 40 	244 AG1
1262	alThrGluArgLeuVəlAlaLeuLeuGlu 20 	184 F
1202	5 (1-4790)	US-10-029-345A-109 (1-665) x US-10-648-593-115
Db 1142 Argaacctgrectgrettcaaaggggggaaaaaaagggaaaggcccccaac 1201 Oy 340 rocygalaaagggaaagaaaaaaagggaaaaaagggaaagaaggccycaac 1201	ss: 663 cvative: 0 ches: 2 s: 4	Percent Similarity: 99.40% Conservativ Best Local Similarity: 99.40% Mismatches: Query Match: 70.98% Indels: DB: 18 Gaps.
1082		0 472 00
Db 1022 CTATATCTCCAAACTTCTGGGCCAACTCTGGACTATGAGAAGAAGATTAAGA 1081		: LENGTH: 4790 ; TYPE: DNA ; ORGANISM: HOMO Sapiens US-10-648-593-115
962		NUMBER OF SEQ ID NOS: 557 SOFTWARE: PatentIn version 3.2 SEQ ID NO 115
		CURRENT APPLICATION NUMBER: US/10/648,593 CURRENT FILING DATE: 2003-08-26 PRIOR APPLICATION NUMBER: 60/406,385
Page 20		

유 성 뭐

8 8 8

Db 709 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 768	ysLeuMetLysArgArgLeuGlnGln 	Oy 21 SerGlyThrGluLyBValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40	1 MetAlaHisGluMetIleGlyThrGlnIleValTh 589 ATGGCCCATGAGATGATTGGAACTCAAATTGTTAC	/ Match: 70.98% Indels: 18 Gaps: 0-029-345A-109 (1-665) x US-10-357-930-20824 (1-51		OTHER INFORMAT		SOFTWARE: FastSEQ for SEQ ID NO 20824 LENGTH: 5145 TYPE: DNA	PRIC PRIC	PRIC PRIC PRIC	PRIC PRIC PRIC	CURRENT FILING DATE: 2003-02-04 ; PRIOR APPLICATION NUMBER: 09/785,276 ; PRIOR FILING DATE: 2003-02-16 ; PRIOR PILING DATE: 600/183,319	TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PRÉVENTION, AND TITLE OF INVENTION: HUMAN PROSTATE CANCER FILE REFERENCE: MRI-0079CN CHUBERUT BEDET CANCER MRI-0079CN AUTHOREUM 115/10/157 920	APPLICANT: Schlegel. Robert APPLICANT: Endege, Wilson APPLICANT: Monahan, John TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METE	US-10-357-930-20824 ; Sequence 20824, Application US/10357930 ; Publication No. US20040259086A1 ; GENERAL INFORMATION:		Db 2102 ACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTC	er G	Db 2042 AAAAGCAGTTTAAACGCAGAAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGA 2101
. ;	를 <i>&</i>	da Ç	\$ B &	D Qy	g Qy	Qy da	QY db	Qy dd	B &	B &	55 A	B &	B 8	Q dq	B &	QQ QQ	B &	. 5	S S
	400 heSerLeuAgpIleLyaSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP 420	SEALEASPALGHENGINABOSELASHIYBLEUDYBALGOET TO CCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT 17	60 alProSerValProSerValGlnProSerLeuLeuGluAppSerProLeuValGlnAlaL 3	CG 16	320 BnGluProValProAlaValSerGluGlyGlyGlnLy8SerGluThrProLeuSerProP 340 	300 snGlnThrGlyAlaSerGlyProLysSerLysLeuLeuHisLeuGluLysProA 320 	280 hrileSerProAgnPheAgnPheLeuGlyGlnLeuLeuAgpTyrGluLygLygIleLygA 300 	260 etlybärgmetäbpmetserleuäbpgluälaTyrärgPheVallysgluLysärgProt 280 	240 alleuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM 260 	220 euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV 240 	200 heileProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL 220 	181 -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP 200 	161 ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180 	141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160 	121 LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140 	101 ABDCY8PheLeuThrValLeuLeuGlyLy8LeuGluLy8SerPheA8nSerValHi8Leu 120 	81 CysserGinLy8ValvalVallyFx8bGinSerserGinAsbValAlaserLeuserser 100	9 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT 8	61 AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 8

유정 밁 Ś ₽ Ś 밁 S 뮻 Ś

```
APPLICANT: Schlegel. Robert

APPLICANT: Endege, Wilson

APPLICANT: Endege, Wilson

APPLICANT: Monahan, John

ITILE OF INVENTION: INVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR

ITILE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THEF

ITILE OF INVENTION: HUMAN PROSTATE CANCER

CURRENT PAPPLICATION NUMBER: US/10/357,930

CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT FILING DATE: 2003-02-04

PRIOR APPLICATION NUMBER: 09/785,276

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/189,862

PRIOR APPLICATION NUMBER: 60/189,862

PRIOR APPLICATION NUMBER: 60/207,454
                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 18
US-10-357-930-20969
US-10-357-930-20969
; Sequence 20969, Application US/10357930
; Publication No. US20040259086AI
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       luIleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAGGTCACGGGAAGAGCTGGGGAAAAGTGGGCAGTCAAGTTTTTCGGGCAAGCATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ĠĠĊĀĠĀĀĠĊĊĀĀĠŦĠĀĊĀĠĀĠĊŦĠĀĊŦĊĠĊĠĠĊĠĠĀĠĊŦĠĠĊĀŦĠĀĀĠĀĠĀĠĊĊĊĊŦŦŦĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ccacagagrecteacactreracterecercagecareracgaageageageageageract
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       gicerrica accade cade a de care a como de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de consecuencia de cons
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A CAA GCTAT GC CAGTT CT CCCCTGTT CAGGAACTAT CGGAGCAGACT CCCGAAACCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                665
                                                                                                                                                                                                                                                                                                  FOR
THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    560
                                                                                                                                                                                                                                                                                                       얶
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; PRIOR FILING DATE: 2000-05-25
; PRIOR APPLICATION NUMBER: 60/211,314
; PRIOR FILING DATE: 2000-06-09
; PRIOR FILING DATE: 2000-07-18
; PRIOR APPLICATION NUMBER: 60/255,281
; PRIOR APPLICATION NUMBER: 60/255,281
; PRIOR FILING DATE: 2000-17-13
; NUMBER OF SEQ ID NOS: 62232
; SOFTWARE: FastSEQ for Windows Version 4."
; SEQ ID NO 20969
; LENGTH: 5145
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: 1, 5144, 5145
; OTHER IMPORMATION: n = A,T,C or G
US-10-357-930-20969
                            멼
                                                                 δ
                                                                                                                                  밁
                                                                                                                                                                       ઇ
                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-029-345A-109 (1-665) x US-10-357-930-20969 (1-5145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
Pred. No.:
                                                                                                                                1128
                                                                                                                                                                                                                                         1069
                                                                                                                                                                                                                                                                                                                                                  1009
                                                                            200
                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                                                                                                                                                   141
                                                                                                                                                                                                                                                                                                                                                                                                                                                         949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ,..
                                                                                                         TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT
                                          helleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                                                  CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT- 1127
                                                                                                                                                                                                                                                       ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                           LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysser
                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ĠĀĊĪĠĪŦĪĪĊĪĊĀĊĪĠĪĀĊĪĪĊĪĠĠĠĪĀĀĀĊĪĠĠĀĠĀĠĀĠĊĪĪĊĀĀĊĪĊĪĠŤĪĊĀĊĊĪĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  réca drica da Addrir dra dritra de arca a a de crece da da retre de creteren en caracteren en caracteren en conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CysSerGlnLysvalValVyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACAAAGTGTTAATTTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 cacattritégaageceattaatateaaettéctecaagettaitéaagedaagettgeaaeag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HislleLeuGluAlalleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                040
        1246
                                                           220
                                                                                                            1186
                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                              1068
                                                                                                                                                                                                                                                                                                                                                                               160
                                                                                                                                                                                                                                                                                                                                                                                                                                     1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 648
```

문 Ś 밁 Ś 뭐 Ş 문 δ 밁 Ś 밁 S 밁 S 밁 Ş

```
2267
                                                                                        2207
                                                                                                                                                2147
                                                                                                                                                                                                        2087
                                                                                                                                                                                                                                                                2027
                                                                                                                                                                                                                                                                                                                         1967
                                                                                                                                                                                                                                                                                                                                                                                 1907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1427
                                                                                                                                                                                                                                                                                                                                                                                                                                           1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1247
                                                                                                                                                                                                                                    500
                                                                                                                                                                                                                                                                                                                                                    460
                                                                                                                                                                                                                                                                                                                                                                                                              440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            340
                                                         560
                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    280
 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  220
                                                                                                                                                                                                       TATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCG
                                                                                                                                                                                                                                                                                                                                      roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                     isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                 GCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGC
                                                                                                                                                              lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH
                                                                                                                                                                                                                       euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                              lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                       CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC
                                                                                                                                                                                                                                                                                                                                                                                  ACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                          heSerSerSluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  etLy8ArgMetA8pMetSerLeuA8pGluAlaTyrArgPheValLy8GluLy8ArgProT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                             laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCCAAAAGCCTCCAATGGATGTG
                              CCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT
                                                                                      2266
                                                                                                                                                2206
                                                                                                                                                                                                        2146
                                                                                                                                                                                                                                                                                                                                                                                                                                            1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1366
                            2326
                                                                                                                                                                                                                                                                2086
                                                                                                                                                                                                                                                                                                                         2026
                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                 1966
                                                                                                                                                                                                                                                                                                                                                                                                               460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1306
600
                                                                                                                                                                           540
                                                                                                                                                                                                                                    520
                                                                                                                                                                                                                                                                                            500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                문
                                       Ś
                                                                                                                  Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                음 성 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                           Pred.
                                                                                                                   Match:
                                                                                                                                                                           No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               620
                589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           099
                                          μ
                ATGGCCCATGAGATGATTGGAACTCAAATTG
```

ঠ

밁

S

밁

В

S 밁 밁

ş 밁 S

S

밁

ક 밁 S 밁

S 망 ঠ

ð

밁

S 밁 ક 밁 ş 밁 ક 문 ર્ક

ð

밁

र्

5 맑

밁

```
GENERAL INFORMATION:
APPLICANT: Schlege, Wilson
APPLICANT: Endege, Wilson
APPLICANT: Endege, Wilson
APPLICANT: MONDAIDAIN, JOAN
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT APPLICATION NUMBER: 09/785,276
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,862
PRIOR APPLICATION NUMBER: 60/183,862
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/250,8862
PRIOR APPLICATION NUMBER: 60/250,8862
PRIOR APPLICATION NUMBER: 60/250,8
                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 19
US-10-357-930-21071
                                                                                 US-10-029-345A-109 (1-665) x US-10-357-930-21071
                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 21071, Application US/10357930 Publication No. US20040259086A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION
MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               luIleIleGluValSer 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rgGlnLygProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
472.00
99.40%
99.40%
70.98%
                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                    (1-5145)
                                                                                                                                       5145
663
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FOR
THERAPY
                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  읶
```

320 snGluprovalProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP 340	7 TSAAGAGATGGCATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAGAAAAAAAGACCTA 10 hrIleSerproamheasmpheleuGlyGlnleuleuasptyrGlulyslyslielysa 11	-0 4-0 4-	101 GINGINASNOLYLLEGIYYEVBLEUASNALASETTYF-ThrCysProLysProAspp 200	0-2 2-11	101 AspcysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120	ASPLYSVALLEUILETHTGLULEUILEGI	21 SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40
RESULT 20 US-10-357-930-21083 ISEQUENCE 21083, Application US/10357930 SEQUENCE 21083, Application US/10357930 Publication No. US20040259086A1 GENERAL INFORMATION: GENERAL INFORMATION: GENERAL INFORMATION: HORDICANT: Endege, Wilson APPLICANT: Endege, Wilson TITLE OF INVENTION: OPEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HUMAN ENGINEER CANCER FILE REFERENCE: MAI-007BCN FILE REFERENCE: MAI-007BCN CURRENT APPLICATION NUMBER: US/10/357,930 CURRENT FILING DATE: 2003-02-04	Db 2447 AAAAGCAGTTTAAACGCAGAAAGCTGCCAAATGGAATTTGAAGACATCATGTCAGAGA 2506 Qy 640 snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetg 660	2327 CTGCCTACAGCTGCAGCTGCCCCACTTGCGGGAAGTCTATTCTGTGCGCAGGC 600 rgGlnLysProSerAspArgAlaspScrArgArgScrTrpHisGluGluScrProPheg	isser	500 euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG	Qy 460 roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG 480	420 heSerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA 440	Db 1727 TCAGTGGGCTGCACCTGTCCGCAGACAGGCTAGAAGACGCAATAAGCTCAAGCGTTCCT 1786 Oy 400 heSerLeuAsplleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyp 420

Ś

음 성

8 8 8 8 8

용 성 유

성 음 성

밁

В

중 음 중

밁

8 8 8 8 8 8 8 8 8

৪ ৪ ৪

8 8 8 8

```
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR FILING DATE: 2003-02-16
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR PILING DATE: 2000-02-17
PRIOR PILING DATE: 2000-02-17
PRIOR APPLICATION NUMBER: 60/189,862
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR PILING DATE: 2000-05-25
PRIOR PILING DATE: 2000-05-25
PRIOR PILING DATE: 2000-06-09
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR PILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 62232
SOPTWARE: FASTSEQ for Windows Version 4.(
SEQ ID NO 21083
LENGTH: 5145
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
LOCATION: 1, 5144, 5145
OTHER INFORMATION: n = A,T,C or G
US-10-357-930-21083
                                                                                                                                                                                                                                                                                                                                           र्
  ફ
                       밁
                                                    S
                                                                                      밁
                                                                                                          र्
                                                                                                                                            밁
                                                                                                                                                                    ঠ
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-029-345A-109 (1-665) x US-10-357-930-21083 (1-5145)
                               1069
                                                                                        1009
                                                          161
                                                                                                                                             949
                                                                                                                                                                       121
                                                                                                                                                                                                     889
                                                                                                                 141
                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                             829
                                                                                                                                                                                                                                                                                                                     769
                                                                                                                                                                                                                                                                                                                                                                            709
                                                                                                                                                                                                                                                                                                                                                                                                                                      649
    181
                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                        41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ۳
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                     AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                              Cy6SerGlnLy6ValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                    AsplysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                           HisileLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                            ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                       ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                     GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                               CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
  -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP
                               CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ٧.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ŀ
                                                                                      1068
                                                                                                                                             1008
                                                          180
                                                                                                                160
                                                                                                                                                                        140
                                                                                                                                                                                                     948
                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                             888
                                                                                                                                                                                                                                                                                       100
                                                                                                                                                                                                                                                                                                                     828
                                                                                                                                                                                                                                                                                                                                                80
                                                                                                                                                                                                                                                                                                                                                                            768
                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                     708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
              S
                                           밁
                                                                 Ś
                                                                                                  밁
                                                                                                                      S
                                                                                                                                                         망
                                                                                                                                                                                   δ
                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                  吊
                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1187
                                                                                                    2087
                                                                                                                                                           2027
                                                                                                                                                                                                                  1967
                                                                                                                                                                                                                                                                           1907
                                                                                                                                                                                                                                                                                                                                    1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1247
                 540
                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                      440
                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                       400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                              GCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGC
                                                              lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH
                                                                                                    TATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCACCAGCTTCCTTTTCG
                                                                                                                       euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                          lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                    CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC
                                                                                                                                                                                                                                 roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                         ACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTC
                                                                                                                                                                                                                                                                                        snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                                    TCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCA
                                                                                                                                                                                                                                                                                                                                                 heSerSerSluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                           TCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                           heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP
                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCACCATCGCTATCGCCTACATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCAGCAGAATGGGATTAGGTTAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2206
                                                                                                    2146
                                                                                                                                                                                                                                                                                                                                                                                            1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1246
                 560
                                                                         540
                                                                                                                              520
                                                                                                                                                            2086
                                                                                                                                                                                      500
                                                                                                                                                                                                                  2026
                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                           1966
                                                                                                                                                                                                                                                                                                       460
                                                                                                                                                                                                                                                                                                                                    1906
                                                                                                                                                                                                                                                                                                                                                               440
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1186
                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
```

밁

2207

```
US-10-357-330-Z1303

Sequence 21303, Application US/10357930

Publication No. US20040259086A1

APPLICANT: Schlegel. Robert

APPLICANT: Schlegel. Robert

TITLS OF INVENTION: HOWAIT GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HOWAIT CANCER

FILE REFERENCE: MRI-007BCN

CURRENT APPLICATION HUMBER: US/10/357,930

PRIOR PELILING DATE: 2003-02-04

PRIOR APPLICATION NUMBER: US/10/357,930

PRIOR PILING DATE: 2003-02-16

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR PILING DATE: 2003-02-17

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/19,862

PRIOR APPLICATION NUMBER: 60/19,862

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/213,303

SOFTWARE: PASCED TO NOSE 6225

SEQ ID NO 21303

SEQ ID NO 21303

LENGTH: 5144

COCANISM: Homo Sapiens

FRATURE: NAME/KEY: misc feature

LOCATION: 1, 5144, 5145

TYPE: DAM

OCCANISM: Homo Sapiens

FRATURE: INFORMATION: n = A,T,C or G
                         Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 21
US-10-357-930-21303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뭥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               성 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAATCATTGAGGTCTCC 2583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               luIleIleGluValSer 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ccacagagrecteacaerreraerergecercagecareraegaggaggeagreceagriaer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |aThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTG
                    0
472.00
99.40%
99.40%
70.98%
                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                5145
663
0
2
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                          FOR
THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              640
                                                                                                                                                                                                                                                                                                                                                                                                                                                            쉱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2266
                     Ş
                                               밁
                                                                Ś
                                                                                     B
                                                                                                              Ş
                                                                                                                                         밁
                                                                                                                                                           8
                                                                                                                                                                                       밁
                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-029-345A-109 (1-665) x US-10-357-930-21303 (1-5145)
                                                                                          1487
                                                                                                                                          1427
                                                                                                                                                                                        1367
                                                                                                                                                                                                                                     1307
                     340
                                                                                                                                                                                                                                                                                     1247
                                                                                                                                                                                                                                                                                                                                   1187
                                                                                                                                                                                                                                                                                                                                                                                 1128
                                                                                                                                                                280
                                                                                                                                                                                                                                                                                                                                                                                                                               1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1009
                                                                                                                                                                                                               260
                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                           220
                                                                                                                                                                                                                                                                                                                                                         200
                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41
roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProvalHisProAlaSerV
                                   ATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGGCCCCCTCAGTCCAC
                                                    snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP
                                                                                Accadactigeageateagecaaaageaaaacticaagetigeageageagagageaa
                                                                                               snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA 320
                                                                                                                               CTATAT CTCCAAA CTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA
                                                                                                                                               hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA
                                                                                                                                                                               TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTG
                                                                                                                                                                                                                                                                                       euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                                                                                                                                                                                                                                                                                                         TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT 1246
                                                                                                                                                                                                                                                                                                                                       heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                                                                                                                                                                                                       GCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                      -GlnGlnAsnGlyIleGlyTyrvalLeuAsnAlaSerTyr-ThrCysProLysProAspP 200
                                                                                                                                                                                                                                                                                                                                                                                                                     ArgileLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTGCAGGTGGGTTTGCTGAGTTCTCTGTTTTCCCTGGCCTCTGTGAAGGAAAAATCC 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | HislleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         argecceargagargarriggaacreaaarrgrracrgagaggrregregertecregaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                  1546
              360
                                    1606
                                                          340
                                                                                                                                 1486
                                                                                                                                                                                 1426
                                                                                                                                                                                                                                                     260
                                                                                                                                                        300
                                                                                                                                                                                                                             1366
                                                                                                                                                                                                                                                                            1306
                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                      280
                                                                                                                                                                                                                                                                                                                                                 220
                                                                                                                                                                                                                                                                                                                                                                        1186
                                                                                                                                                                                                                                                                                                                                                                                                                       1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          648
```

밁 Ś 뮍

```
RESULT 22
US-10-357-930-21307
US-10-357-930-21307, Application US/10357930
; Publication No. US20040259086A1
; GENERAL INFORMATION:
; APPLICANT: Schlegel Robert
; APPLICANT: Endege, Wilson
                                                                                                                                                                                          S
                                                                                                                                                                                                                                  र्
                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                              ई
                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                                                                                                  뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                           S
                                                                                                                                 음 성
                                                                                                                                                                   밁
                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                          2147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1607
                                                                                                                                  2507
                                                                                                                                                                          2447
                                                                                                                                                                                                                  2387
                                                                                                                                                                                                                                                            2327
                                                                                                                                                                                                                                                                                                      2267
                                                                                                                                                                                                                                                                                                                                                2207
                                                                                                                                                                                                                                                                                                                                                                                                                                  2087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1667
                                                                                                             660
                                                                                                                                                     640
                                                                                                                                                                                               620
                                                                                                                                                                                                                                       600
                                                                                                                                                                                                                                                                                580
                                                                                                                                                                                                                                                                                                                           560
                                                                                                                                                                                                                                                                                                                                                                                                                                                       500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 380
                                                                                      lullelleGluValSer 665
                                                                                                                                                                                                                                                           ACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                  heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                                            snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                       luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGl
                                                                                                                                                                                                                    GGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTG
                                                                                                                                                                                                                                rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                      CCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT
                                                                                                                                                                                                                                                                                                                   laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                                                                                                                                                        18SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                                                                                                                                                                                                                                                                    lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       euSerGlyLeuH1sLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP
                                                                                                                                  AAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGCACAAAGGCCCGTGCATCCCGCCAGCG
                                                                                        2583
                                                                      .;;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1786
                                                                                                                                  2566
                                                                                                                                                                          2506
                                                                                                                                                                                                                  2446
                                                                                                                                                                                                                                                            2386
                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                      2326
                                                                                                                                                                                                                                                                                                                                                2266
                                                                                                                                                                                                                                                                                                                                                                                          2206
                                                                                                                                                                                                                                                                                                                                                                                                                                  2146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1666
                                                                                                                                                      660
                                                                                                                                                                                               640
                                                                                                                                                                                                                                       620
                                                                                                                                                                                                                                                                                                                          580
                                                                                                                                                                                                                                                                                                                                                                    560
                                                                                                                                                                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                       520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 400
                                                                                           S
                                                                                                                                        δ
                                                                                                                                                                               S
                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                     S
               S
                                                   청 ~ 음
                                                                                                                     밁
                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                           吊
                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                  Score:
               141
                                                         121
                                                                              688
                                                                                                  101
                                                                                                                       829
                                                                                                                                                                                                          709
                                                                                                                                                                                                                                                   649
                                                                                                                                                                                                                                                                                            589
                                                                                                                                                                769
                                                                                                                                           81
                                                                                                                                                                                    61
                                                                                                                                                                                                                              41
                                                                                                                                                                                                                                                                      21
                                                                                                                                                                                                                                                                                                                 ۲
```

```
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: MONAHAN, JOHN
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT ETLING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR FILING DATE: 2003-02-16
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR PILING DATE: 2000-02-16
PRIOR PILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/215,007
PRIOR FILING DATE: 2000-06-09
PRIOR FILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc feature
LOCATION: 1, 5144, 5145
COTHER INFORMATION: n = 1
US-10-357-930-21307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-029-345A-109 (1-665) x US-10-357-930-21307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 21307
LENGTH: 5145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo i
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                     ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                           CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                             AspLysValLeuIleThrGluLeuIleGlnHisSsrAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                          GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A, T, C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (1-5145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FOR
THERAPY
                                                                                                      140
                                                                1008
                                                                                                                                             948
                                                                                                                                                                                                                             888
                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                                                                                                                                          828
                                                                                                                                                                                                                                                                                                                                                  80
                                                                                                                                                                                                                                                                                                                                                                                       768
                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ဝှု
```

유 상 유

Ş 밁

중 유

성 음 성 음

460 roasplysgluGlualaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerg 480	TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCCTCAAGCGTTCCT heSerLeuAspileLysSerValSerTyrSerAlaserMetAlaAlaSerLeuHisGlyp	0 1 0 1 0 1		TTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT SSGTVALASPPheIleGluLysalaLysalaSerAsnGlyCysV	1009 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 1068 161 ArgIleLeuProAsmLeuTyrLeuGlyCysGlnArgAspValLeuAsmLysGluLeuIle 180 1069 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT- 1127 181 -GInGlnAsmGlyIleGlyTyrValLeuAsmAlaSerTyr-ThrCysProLysProAspP 200 1128 GCAGCAGAATTGGGTATGGTTAAATGCCAGCAG-TACCTGTCCAAAGCCTGACT 1186 200 helleProGluSerHisPheLeuArgValProValAsmAspSerPheCysGluLysIleL 220
PRIOR APPLICATION NUMBER: 60/255,281 PRIOR FILING DATE: 2000-12-13 NUMBER OF SEQ ID NOS: 62232 SOFTMARE: FASTSEQ for Windows Version 4.0 SEQ ID NO 22820 LENGTH: 5145 TYPE: DNA ORGANISM: Homo sapiens FEATURE: NAME/KEY: misc_feature LOCATION: 1, 5144, 5145 OTHER INFORMATION: n = A,T,C or G US-10-357-930-22820	APPLICATION ETLING DATE APPLICATION FILING DATE FILING DATE APPLICATION FILING DATE APPLICATION FILING DATE APPLICATION FILING DATE APPLICATION FILING DATE APPLICATION FILING DATE APPLICATION FILING DATE APPLICATION FILING DATE APPLICATION FILING DATE APPLICATION FILING DATE APPLICATION	US-10-357-930-22820 Application US/10357930 Sequence 22820, Application US/10357930 Publication No. US20040259086A1 GENERAL INFORMATION: APPLICANT: Schlegel. Robert APPLICANT: Midege, Wilson APPLICANT: Monahan, John ITILE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR ITILE OF INVENTION: HUMAN PROSTATE CANCER FILE REFERENCE: MRI-007BCN CURRENT APPLICATION NUMBER: US/10/357,930	Db 2447 AAAAGCAGTTTAAACGCAGAAAGCTGCCAAATGGAAGTTTGGAGGAGCATCATGGTCAGAGA 2506 Qy 640 snArgSerArgGluGluLeuGlyLyeValGlySerGlnSerSerPheSerGlySerMetG 660	GAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT TYTSerCysSerGlnLeuProThrCysGlyAspGlnVallyrSerValArgArgA THIS CONTROL OF THE CONTROL	Qy 520 lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH 540

유 성

음 성 ם Ś

음 성

В 성 유

Ş 맑 Ş Б Ś 밁 S 밁 Ś g Ś 망 Ś 음 성

60 etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT 280	Qy 220 euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV 240	Qy 181 -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspp 200	Oy 141 ThILEUVAlProThrCysIleSerGlnProCysLeuProValAlaAsm1leGlyProThr 160		769 GACAAAGTTTAATTACAGAGCTCATCCAGCCAAACATAAGGTTGATTGA	41 HiglleLeuGluAlalleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60 	Db 589 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGTCTCTGCTGGAA 648 Oy 21 SerGlyThrGluLy8ValleuLeulleAspSerArgProPheValGluTyrasnThrSer 40	(1-665) x US-10-357-930-22820 (1-5145) aHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAla	Alignment Scores: Pred. No.: 472.00 Best Local Similarity: Query Match: 18 Length: Matches: 472.00 Matches: 663 Conservative: 0 Mismatches: 70.984 Indels: 18 Gaps: 19
Oy 620 luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetGserGluA 640 [Db 2327 CTGCCTACAGCTGCAGCCAGCTGCCCAAGTCTATTCTGTGCGCAGGC 2 Qy 600 rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG 6	540 1898FABDLELEUM 1	2087 TATCTCCACTGCATCGAAGTGGGAGGAGGACAATTACCACACCAGCTTCCTTTTCG 2 520 lyLeuSerThrSerGlnGlnH1sLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH 5 1	1967 CTGATAAGGAGGAAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC 480 lnSerLysArgLeuHisSerValArgThrSerSerGlyThrAlaGlnArgSerLeuL	Qy 440 snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP 460	400 heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuH1sGlyP 4	7—0 (.	360 alproSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL 380	320 gnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP 340

```
WS-10-357-930-26669

VS-10-357-930-26669

Sequence 26669, Application US/10357930

Publication No. US20040259086A1

GENERAL INFORMATION:

APPLICANT: Schlegel. Robert

APPLICANT: Endege, Wilson

APPLICANT: MORAHAN, JOHN

TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HUMAN PROSTATE CANCER

FILE REFERENCE: MRI-007BCN

CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT APPLICATION NUMBER: 09/785,276

PRIOR APPLICATION NUMBER: 09/785,276

PRIOR PILING DATE: 2003-02-16

PRIOR PILING DATE: 2000-02-17

PRIOR APPLICATION NUMBER: 60/189,862

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR FILING DATE: 2000-03-16

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR FILING DATE: 2000-05-25

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR FILING DATE: 2000-06-09

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/219,007

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION SUMBER: 60/255,281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA

ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
LOCATION: 1, 5144, 5145
OTHER INFORMATION: n = A
US-10-357-930-26669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-029-345A-109 (1-665) x US-10-357-930-26669 (1-5145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores:
                                                         101
                                                                                                  829
                                                                                                                                                                                 769
                                                                                                                                                                                                                                                                   709
                                                                                                                                                                                                                                                                                                                                                    649
                                                                                                                                                                                                                                                                                                                                                                                                                                   589
                                                                                                                                        81
                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                       41 HisīleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60
                                                                                                                                                                                                                                                                                                                                                                                           21
  ĠĀĊĪĠĪTĪTĊĪĊĀĊĪĠĪĀĊĪTĊĪĠĠĠĪĀĀĀĊĪĠĠĀĠĀĀĠĀĠĊĪĪĊĀĀĊĪĊĪĠĪŢĊĀĊĊĪĠ
                          GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                          SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40
                                                                                                                                                                                                                                                                                                                                AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5145
n = A,T,C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FOR
                                         120
                                                                                 888
                                                                                                                      100
                                                                                                                                                                828
                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                 768
                                                                                                                                                                                                                                                                                                                                  708
                                                                                                                                                                                                                                                                                                                                                                                                                    648
                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              얶
               밁
                                           5
                                                                                              밁
                                                                                                                          Ş
                                                                                                                                                                         밁
                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                        당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                              1907
                                                                                                                                                                               1847
                                                                                                                                                                                                                                                              1787
                                                                                                                                                                                                                                                                                                                                             1727
                                                                                                                                                                                                                                                                                                                                                                                                                            1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1487
                                                                                                                                 440
                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                      400
                                                                                                                                                                                                                                                                                                                                                                                     380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                            roAspLysGluGluAlaSerIleDroLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                           heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP
                                                                                                                                                                                                                                                                                                                                TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                                                                                                                                                                                        euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                     alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                                                                                                                                                                                                                                                                                                               receaecereceis de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire de la receire d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGTGCCGACTCTGCTACTACAGGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProp 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTATATCTCCANACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAA-TACCTGTCCAAAAGCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TITTAGTIGCACTGITTAGCTGGGATCTCCCGCTCCGCCACCATCGCTACACATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ArgileLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsmIleGlyProThr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuAlaGlyGlyPheAlaGluPheSerArgCyBPheProGlyLeuCySGluGlyLyBSer
                                                                                                                      460
2026
                                       480
                                                                                                                                                                1906
                                                                               1966
                                                                                                                                                                                                       440
                                                                                                                                                                                                                                                 1846
                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                1786
                                                                                                                                                                                                                                                                                                                                                                                                                                                         380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                        400
                                                                                                                                                                                                                                                                                                                                                                                                                 1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1008
```

Ś 밁 5 B Ś 밁 Ś 밁 Ş

문 S

```
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT FILING DATE: 2003-02-04
PRIOR REPLICATION NUMBER: 09/785,276
PRIOR PILING DATE: 2003-02-16
PRIOR PELICATION NUMBER: 60/183,319
PRIOR PELICATION NUMBER: 60/183,319
PRIOR PELICATION NUMBER: 60/183,319
PRIOR PELICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-05-25
PRIOR PELING DATE: 2000-60-09
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR PILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 62322
SOFTWARE: FRISTED FOR WINDOWS Version 4.0
SEQ ID NO 26815
LENGTH: 5145
           RESULT 25
US-10-357-930-26815
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ર્ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                        Sequence 26815, Application US/10357930

Publication No. US20040259086A1

GENERAL INFORMATION:

APPLICANT: Schlegel. Robert
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
                                                                                                                                                                                                                                                                                                                                                                                                                 2567
                                                                                                                                                                                                                                                                                                                                                                                                                                                              2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2207
                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                                                                                 AAATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                               luIleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGGTCACGGGAAAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTTCGGGCAGCATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGGGCTGGCATGAAGAGAGCCCCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTOGGATATOTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                 2583
                                                                                                                                                                                                                                                                                                                                                                                                                                        665
                                                                                                                                                                                                                                                                                                                                                                                                                                                              2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                  Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Homo sapiens FEATURE; NAME/KEY: misc feature; LOCATION: 1, 5144, 5145; OTHER INFORMATION: n = AUS-10-357-930-26815
                                                                                                                                                                                                                                                                         ફ
                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
                                                                  밁
                                                                                    S
                                                                                                         밁
                                                                                                                                   S
                                                                                                                                                             밁
                                                                                                                                                                              ঠ
                                                                                                                                                                                                          밁
                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                          맑
                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    श्च
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-029-345A-109 (1-665) x US-10-357-930-26815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score:
                    1367
                                                                                                               1247
                                                                                                                                                              1187
                                                                                                                                                                                                             1128
                                                                   1307
                                                                                                                                                                                                                                                          1069
                                                                                                                                                                                                                                                                                                         1009
                                                                                                                                                                                                                                                                                161
                                                                                                                                       220
                                                                                                                                                                                    200
                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                               141
                                                                                                                                                                                                                                                                                                                                                      949
                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                     688
                                                                                                                                                                                                                                                                                                                                                                                                                                                   829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           983
                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21
                                                                                                                                                                                                                                                                                                                                                     MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                    etLygArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT
                                                                  ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                             heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                                                                                                                                                    ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                               CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                  TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTG
                                                                                                                            euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                                                                                                                                              TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5145
n = 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
472.00
99.40%
99.40%
70.98%
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A, T, C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (1-5145)
                      1426
                                            280
                                                                    1366
                                                                                                                                                               1246
                                                                                                                  1306
                                                                                                                                       240
                                                                                                                                                                                                             1186
                                                                                                                                                                                                                                   200
                                                                                                                                                                                                                                                            1127
                                                                                                                                                                                                                                                                                                         1068
                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                     220
                                                                                                                                                                                                                                                                                                                                160
                                                                                                                                                                                                                                                                                                                                                        1008
                                                                                                                                                                                                                                                                                                                                                                               140
                                                                                                                                                                                                                                                                                                                                                                                                      948
                                                                                                                                                                                                                                                                                                                                                                                                                                                    888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20
```

S В 8 밁 S 문

340

1547

320

1487

300

1427

1607

```
snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG 660
                                                                                                                                                   ĠĠĊĀĠĀĀĠĊĊĀĀĠŦĠĀĊĀĠĀĠĊŦĠĀĊŦĊĠĊĠĠĊĠĠĀĠĊŦĠĠĊĀŦĠĀĀĠĀĠĀĠĊĊĊĊŦŦŦĠ
                                                                                                                                                                                                                                                                                                                                                    rgGlnLysProSerAspArgAlaAspSerArgArgSerTxpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   crecciacaecrecaecraecrececaerrecesaeaeaecaaererarrererecesaec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                erAlaTyrSerCysSerGlnLeuDroThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS 580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ĠĊĊŢŢŶĊĊĀĊĊĀĠĊĊĀĠĊĀĠĊĀĊĊŶĊĀĊĠĀĀĠŶĊŶĠĠĊĊŶĠĠĠĊĊŶŶĀĀĠĠĠĊŶĠĠĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                zárcrecacrecarecaacrecas de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG 520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCAGAGGTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ĊŦĠĀŦĀĀĠĠĀĠĠĀĀĠĊĊĀĠĊĀŦĊĊĊĊĀĀĠĀĀĠĊŦĠĊĀĠĀĊĊĠĊĊĀĠĠĊĊŦŦĊĀĠĀĊĀĠĊĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          roAspLysGluGluAlaSerIleDroLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACAAGCTÁTGCCÁGTTCTCCCCTGTTCÁGGAÁCTÁTCGGAGCAGACTCCCGAÁÁACCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           snLysLeuCysGlnPheSerProvalGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCT 1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                heSerLeuAspIleLysSerValSerTyrSerAlaSarMetAlaAlaSerLeuHisGlyP 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisBroAlaSerV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ccrercica de recensiones de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la constanción de la
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGACACGCCCCTCAGTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     a c c a da c reca de care ca de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa de certa d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             snGlnThrGlyAlaSerGlyProLysSerLysLeuLeuHisLeuGluLysProA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       640
                                                                                                                                                                                                                                                                                            2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                             620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Schlegel, Wilson
APPLICANT: Endege, Wilson
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
ITILE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
ITILE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
ITILE OF INVENTION: HUMAN PROSTATE CANCER
ITILE OF INVENTION: HUMAN PROSTATE CANCER
ITILE OF INVENTION: HUMAN PROSTATE CANCER
ITILE OF INVENTION: HUMAN PROSTATE CANCER
ITILE OF PREPLICATION NUMBER: US/10/357,930
CURRENT PELLORATION NUMBER: US/10/357,930
CURRENT PILLING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 00/183,319
PRIOR PILLING DATE: 2003-02-16
PRIOR PILLING DATE: 2003-03-16
PRIOR PILLING DATE: 2000-03-16
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR PILLING DATE: 20
                                             밁
                                                                                                               S
                                                                                                                                                                                                                          뮍
                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-029-345A-109 (1-665) x US-10-357-930-26912 (1-5145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 26
US-10-357-930-26912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 26912, Application US/10357930 Publication No. US20040259086A1
                                        769
                                                                                                                                                                                                                          709
                                                                                                                                                                                                                                                                                                                                                                                                                      649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   589
                                                                                                                               61
                                                                                                                                                                                                                                                                                                                 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660 luIleIleGluValSer 665
                                                                                                                                                                                                                                         | HislleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 80
                                                                                                                                                                                       ĊĀĊĀTTTTGĠĀĀĠĊĊĀTTĀĀTĀTĊĀĀĊĪĠĊTĊĊĀĀĠĊTTĀTGĀĀĠĊĠĀĀĠĠŤTĠĊĀĀĊĀĠ
                                                                                                                                                                                                                                                                                                                                                                              AAATCATTGAGGTCTCC 2583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
472.00
99.40%
99.40%
70.98%
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          648
                                                                                                                                                                                            768
                                                                                                                                                                                                                                                                                                                                                                                   708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2566
```

문 Ś 문 ş B Ś 밁 Ś В Ş 밁 Ś 밁 Ś 문 Ś 밁 Ś 밁 S В Ş 밁 Ś 밁 5 밁 정 유

2447

2387

600

2327

580

2267

560

2207

2147

520

540

2087

500

2027

480

1967

460

1907

440

1847

420

1727

400

1667

360

PRIOR FILING DATE: 2000-07-18	440 enLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP 460
PRIOR FILING DATE: 2000-05-25; PRIOR APPLICATION NUMBER: 60/211,314 PRIOR PILING DATE: 2000-06-09 PRIOR PILING DATE: 2000-06-09	Y 420 heSerSerGluaspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA 440
PRIOR PILING DATE: 2000-02-17 PRIOR PELING DATE: 2000-03-16 PRIOR APPLICATION NUMBER: 60/189,862 PRIOR APPLICATION NUMBER: 60/207.454	y 400 heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP 420
CURRENT FILING DATE: 2003-02-04 PRIOR APPLICATION NUMBER: 09/785,276 PRIOR APPLICATION NUMBER: 50/183,319	7 380 euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP 400
TITLE OF INVENTION: INCRED: CONFESSIONENT, PREVENTION, AND THERAPY OF TITLE OF INVENTION: HUMAN PROSTATE CANCER FILE REFERENCE: MRI-075CN 1075CN - CIPERRY DEPLICATION 1075CN - CIPERRY DEPLIC	y 360 alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL 380
SUCREMENT ONCE SELS SUCRE.	7 340 roCygalaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV 360
US-10-357-930-26923 US-10-357-930-26923, Application US/10357930 ; Sequence 26923, Application US/10357930 ; Publication No. US20040259086A1	y 320 snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP 340
Db 2567 AAATCATTGAGGTCTCC 2583	y 300 snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA 320
2507 ACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGCTTTTCGGGCAGCATGG	Y 280 hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA 300
100 100	y 260 etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT 280
2387	y 240 alleuValHisCysLeuAlaGlyIleSexArgSexAlaThxIleAlaTyxIleM 260
200 ELAIATY SEERCY SEERGITHEUF ROTHER SEET WALKELY HER SEERCH SEE	9 220 euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV 240
560 ATALATICSENSETHERRETYISSTALABITETYTCHYCLYSGIYYSTALABETTYTC 	9 200 heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL 220
540 leseraby leLeun larrostniniserinirioserileun isereriip yffinen	Y 181 -GInGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP 200 1128 GCAGCAGAATGGGTTATGTGTTAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT 1186
20 Ayelberintsetoinginhibeunintysetalagiyaeugiyaeugysetyiiph 	Y 161 ArgileLeuProAsmLeuTyrLeuGlyCysGlnArgAspValLeuAsmLysGluLeuIle 180
2087 TATCTCCACTGCATCGAAGTGGGAGGACAATTACCACCACCACCTTCCTT	Y 141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160
480 inserbyehrgueuntsservaltarginzsersersetylynnaldynargeerbeub 1	y 121 LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140
1967 CTGATAAGGAGGAAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC	y 101 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAspSerValHisLeu 120
1907	9 81 CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100

중 유

음 성 음

중 유 Ś 중 음

음 성

S

유

유성

В

Ś 밁 S र है है

음 성 음

밁

ち 음 ち

음 성 음 성

유정

11 2 2 11 12 2 2 2 2	1009 AC	Qy 101 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120	61 AsplysValleulleThrGluLeulleGlnHisSerAlaLysHisLysValAsplieAsp [OY MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu 20	ignment Sco: eed. No.: ore: rcent Simil: st Local Si st Local Si ery Match: :	PRIOR APPLICATION NUMBER: 60/255,281 PRIOR FILING DATE: 2000-12-13 VUMBER OP SEQ.ID NOS: 62232 SOFTWARR: FRACESQ for Windows Version 4.0 ENGTH: 5145 TYPE: DNA ORGANISM: Homo sapiens FEATURE: NAME/KEY: misc_feature COTHER INFORMATION: n = A,T,C or G US-10-357-930-26923
5	9	S & & & &	DB Q2 DB Q2 EB	2	00 V V V V V V V V V V V V V V V V V V	Q
540 isserAspileLeuAlaProGinThrSerThrProSerLeuThrSerSerTrpTyrPheA 560	20	460 roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgproSerAspSerG 480	1/87 TUTUTUTGGATATCAAATCAGTTTCATATTCAĞĞCĞAĞĞĞAĞĞĞĞĞĞĞĞĞĞ		1487 ACCAGACTGGAGCATCAGGCCAAAAGAGCAAACTCCAAGCTGCTGCACCTGGAGAAGAGCCAA 1546 320 snGluProValProAlaValSerGluGlyGlyGlyGlnLysSerGluThrEvoLeuSerFroP 340	1307 TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTACCGCTACACATCA 1366 260 etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT 280

BESULT 28 Select 20145 Application US/10357930 Publication No. US20040255086Al Publication No. US20040255086Al APPLICANT Schiegel, Robert APPLICANT: Schiegel, Robert APPLICANT: Mondan, John ITTLE OF INVENTION: HUMAN PROTATE CANCER TITLE OF INVENTION: HUMAN PROTATE CANCER TITLE OF INVENTION: HUMAN PROTATE CANCER TITLE OF INVENTION: HUMAN PROTATE CANCER TITLE OF INVENTION: HUMAN PROTATE CANCER TITLE OF INVENTION: HUMAN PROTATE CANCER TITLE OF INVENTION: HUMAN PROTATE CANCER TITLE OF INVENTION: HUMAN PROTATE CANCER TITLE OF INVENTION: HUMAN PROTATE CANCER TITLE OF INVENTION: HUMAN PROTATE CANCER TITLE OF INVENTION: HUMAN PROTATE CANCER TITLE OF INVENTION WOMER: 05/10/357,930 CREATION FILLING DATE: 2000-05-15 PRIOR PILLING DATE: 2000-05-15 PRIOR PILLING DATE: 2000-05-16 PRIOR PILLING DATE: 2000-05-25 PRIOR PILLING DATE: 2000-05-25 PRIOR PILLING DATE: 2000-05-25 PRIOR PILLING DATE: 2000-06-09 PRIOR PILLING DATE: 2000-06-09 PRIOR PILLING DATE: 2000-16-09 PRIOR PILLING DATE: 2000-16-16 PRIOR PILLING DATE: 2000-16-16 PRIOR PILLING DATE: 2000-16-16	Oy 660 lullelegluvalser 665 Db 2567 AAATCATTGAGGTCTCC 2583	2507 ACAGGTCACGGAAGAGCTGGGGAAAAGTGGGCAGTCAGGTCTAGCTTTTCGGGCAGCATGG	2447 AAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGAGCATCATGTCAGAGA	Db 2387 GGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTG 2446 Oy 620 luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMètSerGluA 640
8	로 성	ρ <i>Q</i>	d Qy	Db
121 Leunlacitydiyphealacitumeseringcyphephericityleungcitudylysser 140 94 CHIOCHGUGGITTCCGAGTTCTTCGGTGTTTCCCGGCCCCCCGGGCGGAGAARTCC 106 141 Threwallproffic failescriptyleungcitudyllysser 140 95 CTTGCGGTGGTTTCCGAGTTCTTCGGTGTTCCTCGCTTGCTT	101 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120 	81 CysSerGinLysValValTyrAspGinSerSerGinAspValAlaSerLeuSerSer 100 	61 ASPLYSVALLEUILEThrGluLeuIleGlnHisSerAlaLysHisLYsValAspIleAsp 80 	

정 유 Ş 밁 Ş 뮍 S 8 Ş 밁

```
RESULT 29

(US-10-357-930-27149

(US-10-357-930-27149)

(Sequence 27149, Application US/10357930)

(Publication No. US20040259086A1)

(Publication No. US20040259086A1)

(Publication No. US20040259086A1)

(Publication No. US20040259086A1)

(Publication No. US20040259086A1)

(Publication No. US20040259086A1)

(Publication No. US20040259086A1)

(Publication Novel Genes, Compositions, Kits, And Methods For Title OF INVENTION: HUMAN PROSTATE CANCER

(PILE REFERENCE: MRI-007BCN

(CURRENT APPLICATION NUMBER: US/10/357,930)

(PRIOR APPLICATION NUMBER: 09/785,276

(PRIOR APPLICATION NUMBER: 09/785,276

(PRIOR FILING DATE: 2003-02-16

(PRIOR FILING DATE: 2003-02-16

(PRIOR APPLICATION NUMBER: 60/189,862)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     luIleIleGluValSer
|||||||||
AAATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       snArgSerArgGluGluLeuGlYLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rgGlnLysProSerAspArgAlaAspSerArgArgSerTzpHisGluGluSerProPheg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               creccraciaerieca de crecca de crecca con recedenda de conserva recedende de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de conserva de co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             erAlaTyrSerCysSerGlnLeuDroThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |aThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ĠĊĊŦŦŶĊĊĀĠĊĊĀĠĊĀĠĊĀĠĊĀĊĊŶĊĀĊĠĀĀĠŶĊŶĠĠĊĊŶĠĠĠĊĊŶŶĀĀĠĠĠĊŶĠĠĊ 2206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1\LeuSerThrSerG1nG1nHisLeuThrLysSerAlaG1\LeuG1\LeuLysG1\TrpH 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rarcrecaerdeareaadregaaderregaagaearraceareaeerrega
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        crearanded a de constructor de la marca de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la construcción de la const
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAAGCTÁTGCCAGTTCTCCCCCTGTTCÁGGÁACTÁTCGGÁGCÁGÁCTCCCGÁÁÁCCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   640
                                                                                                                                                                                                                                                                                                                                                 ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1846
                                                                                                                                   뮍
                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR FILING DATE: 2000-06-09
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR TILING DATE: 2000-12-13
SOFTWARE: FASTSEQ for Windows Version 4.
SEQ ID NO 27149
LENGTH: 5145
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-029-345A-109 (1-665) x US-10-357-930-27149 (1-5145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc_feature; LOCATION: 1, 5144, 5145; OTHER INFORMATION: n = A,T,C US-10-357-930-27149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          No.:
                                                                                                                                                                                                                                                                  1069
                                                                                                                                                                                                                                                                                                                                                                                                  1009
                                                               200
                                                                                                                                                                                                                                                                                                                                  161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL 220
                                                                                               GCAGCAGAATGGGATTGGTTAATGTGTTAAATGCCAGCAA-TACCTGTCCAAAAGCCTGACT 1186
                                                                                                                                             -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspp 200
                                                                                                                                                                                                                                   GAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGTGTCCTCAACAAGGAGCTGAT- 1127
                                                                                                                                                                                                                                                                             ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                                                                                         ThrLeuValProThrCysIleSerGlnDroCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140
                                                                                                                                                                                                                                                                                                                                                                  a c renadrece race de la recensión de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace de la contrace d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ĊŦŦĠĊĀĠĠŦĠĠĠŦŦŤĠĊŦĠĀĠŦŦĊŦĊŦĊĠŦŦĠŦŦŦĊĊĊŦĠĠĊĊŦĊŦĠŦĠĀĀĀĠĠĀĀĀĀŤĊĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            cacatritrogaadeccatriaararcaacrocroccaagerratogaagegaaggrigeaacag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | HislleLeuGluAlalleAsn1leAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5145
663
0
2
2
                                                                                                                                                                                                                                                                                                                                                                      1068
                                                                                                                                                                                                                                                                                                                                                                                                                                         160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
```

밁 Ś 밁 Ś 밁 Ś 밁 Ş B δ 밁 S 밁 Ś 뫄 Ś 片

```
1907
                                                                                                                                                                                                                                                                                                                                                                                                         1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1307
 2267
                                                                                                                2147
                                                                                                                                                                                                                                 2027
                                                                                                                                                                                                                                                                                         1967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1187
                                                                                                                                                                        2087
                         560
                                                                                                                                                                                                   500
                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                    460
                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH
                                                                                                                                                                                       euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                 lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                               heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTCTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCACCATCGCTATCGCCTACATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1sSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrbhe
                                                                                                                                                                         TATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCACCAGCTTCCTTTTCG
                                                                                                                                                                                                                                                                                         CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC
                                                                                                                                                                                                                                                                                                      roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGAACCTGTCCCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGC
                                                                                                                                                                                                                                 AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT
                                                                                  560
 2326
                                                                                                               2206
                                                                                                                                                                        2146
                                                                                                                                                                                                                               2086
                                                                                                                                                                                                                                                                                         2026
                                                                                                                                                                                                                                                                                                                                                1966
                                                                                                                                                                                                                                                                                                                                                                                                         1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1306
                                                         2266
                                                                                                                                           540
                                                                                                                                                                                                                                                            500
                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                           460
                                                                                                                                                                                                                                                                                                                                                                                                                                      440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1246
                                                                                                                                                                                                   520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                260
```

유

გ

1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu

20

밁 S 뮹 ঠ 밁 ક 밁 र् 밁 र् 밁 ક 밁 S 밁 र् 밁 र् 밁 र् 밁 S 밁 ş 밁 S 밁 5 문 ð 문 S 밁 S 맑

```
GENERAL INFORMATION:
APPLICANT: Schlegel. Robert
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
ITTLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THER
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT APPLICATION NUMBER: 09/785,276
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,007
PRIOR APPLICATION NUMBER: 60/211,007
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/215,007
PRIOR APPLICATION NUMBER: 60/215,007
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
                                                                                                                                                                               ; ORGANISM: Homo sapiens FEATURE: REATURE: NAME/KEY: misc feature LOCATION: 1, 5144, 5145; OTHER INFORMATION: n = NUS-10-357-930-28675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 30
US-10-357-930-28675
; Sequence 28675, App.
; Publication No. US;
; Publication No. US;
; GENERAL INFORMATION;
; APPLICANT: Schlege;
; APPLICANT: Endege;
                                    Query
DB:
                                                   Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
US-10-029-345A-109 (1-665) x US-10-357-930-28675
                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 28675
LENGTH: 5145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 28675, Application US/10357930 Publication No. US20040259086A1
                                                                                                                                                                                                                                                                                              TYPE: DNA
                                                                                                                              No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2387
                                                                                                                                              Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  luIleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGGTCACGGGAAGAGCTGGGGAAAAGTGGGCAGTCAGGTCTAGCTTTTCGGGCAGCATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    luLygGlnPheLygArgArgSerCygGlnMetGluPheGlyGluSerIleMetSerGluA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                     5145
                                  0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                    A,T,
                                                                                                                                                                                                      'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2583
                                                                                                                                                                                                      유
                                                                                                                                                                                                        G
                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                      4.0
 (1-5145)
                                  FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ဝှု
```

음 성 음

Ś

음 성

8 8 8 8 8 8 8 8

8 8 8

### SINGLEPROVALERONAL STATES AND THE PROPERTY OF THE PROPERTY	27 CTATY 00 SnGli	O etLys	H-0 -1-	/IleglyTyrValLeuAgnAlaSerTyr-ThrCygerysBroAspp	141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160	GACTGTTTCTCACTGTACTTCTGGGTAAACTGGAGAGAGGCTTCAACTCTGTTCACCTG LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer [10	"1 HILLEUGUGINATATIEABNITEABNITEABNITEABNITEABNITEABNITEABNITEABNITEABNITEABNITEABNITEABNITEABNITEABNITEABNITEABNITEABNITEABNITEAR 60	-
RESULT 31 US-10-072-012-255 Sequence 255, Application US/10072012 Publication No. US20040033493A1 GENERAL INFORMATION: APPLICANT: Spytek, Kimberly APPLICANT: Serhusen, Bryan APPLICANT: Patturajan, Meera APPLICANT: Stimkets, Richard APPLICANT: Shimkets, Richard APPLICANT: Shimkets, Richard APPLICANT: Li, Li APPLICANT: Gangolli, Esha	Cy 640 snargSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG 660	600 rgGlni 2387 GGCAG 620 luLyso 11	2267 CCACA 580 erAla 2327 CTGCC	isSerAspIleLeuAlabroGlnThrSerThrbroSerLeuThrSerSerTrpTyrPheA	Qy 500 euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG 520	Db 1967 CTGATNAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC 2026 Qy 480 lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL 500	### PART OF THE PROPERTY OF TH	Oy 400 hoserieuAspilelysSerValSerTyrSerAlaSerMetAlaAlaSerieuHisGlyp 420	Qy 380 euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP 400

B 8 B B

중 음 중

음 성

GRANISM: Homo sapiens US-10-072-012-255 Alignment Scores: Pred. No.: Percent Similarity: 99.32% Conservative: 0 Score: Percent Similarity: 99.32% Mismatches: 0 Best Local Similarity: 99.32% Mismatches: 0 Query Match: 17 Oy 231 GluLysAlaLysAlaSerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArg 250	по нононон	CURRENT APPLICATION NUMBER: 05/265,102 PRIOR APPLICATION NUMBER: 60/265,102 PRIOR APPLICATION NUMBER: 60/265,102 PRIOR APPLICATION NUMBER: 60/265,514 PRIOR PILING DATE: 2001-01-31 PRIOR APPLICATION NUMBER: 60/265,514 PRIOR PILING DATE: 2001-01-31 PRIOR APPLICATION NUMBER: 60/265,517 PRIOR APPLICATION NUMBER: 60/265,412 PRIOR PILING DATE: 2001-01-31 PRIOR APPLICATION NUMBER: 60/265,412 PRIOR PILING DATE: 2001-01-31 PRIOR APPLICATION NUMBER: 60/265,395 PRIOR APPLICATION NUMBER: 60/266,406 PRIOR APPLICATION NUMBER: 60/266,406 PRIOR PILING DATE: 2001-02-02 PRIOR APPLICATION NUMBER: 60/266,767	APPLICANT: Padigaru, Muralidhara APPLICANT: Anderson, David W. APPLICANT: Rastelli, Luca APPLICANT: Miller, Charles E. APPLICANT: Miller, Charles E. APPLICANT: Gerlach, Valerie APPLICANT: Taupier Jr, Raymond J. APPLICANT: Golsev, Vladimir Y. APPLICANT: Wolenc, Adam R. APPLICANT: Wolenc, Adam R. APPLICANT: Pena, Carol E. A APPLICANT: Pena, Carol B. A APPLICANT: Grosse, William M. APPLICANT: Alsobrook II, John P. APPLICANT: Lepley, Denise M. APPLICANT: Rieger, Daniel K. APPLICANT: Rieger, Catherine B. TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
8 8 8 8 8 8 8 8 8 8 8 8 8	8	B & B & B & B &	B & B & B & B & B & B & B & B & B & B &
S30 LyeserAlaGlyLeuGlyLeuLysGlyTrpHisserAspl1eLeuAlaProGlnThrSer 549 1693 AAGTCTGCCTGGCCTTGACCTTTAAGGCTGCACTCGGATATCTTGGCCCCCAGACCTCT 1752 550 ThrProSerLeuThrSerSerTrpTyrPheAlaThrGluSerSerHisPheTyrSerAla 569	70 LysLeuGlnThrAlaArgProSerAspSerGlnSerLysArgLeuHisSerValArgThr	390 LeuGluhappSerhanLysLeuLysArgSerPheSerLeuAspIleLysSerValSerTyr 409	973 CAACTCCTGGACTATGAGAAGATTAAGAACCAGACTGGAGCATCAGGGCCAAAGAGC 1032 310 LysLeuLysLeuLeuHisLeuGluLysProAsnGluProValProAlaValSerGluGly 329

```
APPLICANT: Technev, Velizar
APPLICANT: Spytek, Kimberly
APPLICANT: Spytek, Kimberly
APPLICANT: Spytek, Kimberly
APPLICANT: Spitek, Richard
APPLICANT: Shimkets, Richard
APPLICANT: Shimkets, Richard
APPLICANT: Shimkets, Richard
APPLICANT: Shimkets, Richard
APPLICANT: Shimkets, Richard
APPLICANT: Gangolli, Esha
APPLICANT: Miller, Charles E.
APPLICANT: Anderson, David W.
APPLICANT: Miller, Charles E.
APPLICANT: Miller, Charles E.
APPLICANT: Gasev, Vladimir Y.
APPLICANT: Gasev, Vladimir Y.
APPLICANT: Gosev, Vladimir Y.
APPLICANT: Gosev, Vladimir Y.
APPLICANT: House, Carol E. M.
APPLICANT: House, Carol E. M.
APPLICANT: House, Carol E. M.
APPLICANT: House, Carol E. M.
APPLICANT: Lepley, Denise M.
APPLICANT: Lepley, Denise M.
APPLICANT: Lepley, Denise M.
APPLICANT: Lepley, Denise M.
APPLICANT: Lepley, Denise M.
APPLICANT: Lepley, Denise M.
APPLICANT: NUMBER: 1002-01-31
FILE REFERENCE: 21402-58
CURRENT APPLICATION NUMBER: 109/265, 102
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIOR APPLICATION NUMBER: 60/265, 412
FRIO
                                                                                              Ś
                                                                                                                                        US-10-029-345A-109 (1-665) x US-10-072-012-257 (1-2071)
                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; ORGANISM: Homo US-10-072-012-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOTTWARE: Patentin V
SEQ ID NO 257
LENGTH: 2071
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 32
US-10-072-012-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQ ID NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 257, Application No. US200 GENERAL INFORMATION:
                                                   MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Application US/10072012
o. US20040033493A1
                                                                                                                                                                                                                                  6.8e-295
304.00
98.65%
98.65%
45.71%
                                                                                                                                                                                                                                                                         Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
                                                           20
                                                                                                                                                                  밁
                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                    1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      959
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    899
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  161 ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241 GACAAĀGTGTTĀATTĀCAGĀĠĊTĊĀTĊĊĀĠĊĀTŤĊĀĢĊĠĀĀĀĊĀTĀĀĠĠTTĠĀCĀTŤĠĀŤ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61 AspLysValLeuileThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 80
alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                                      Arda Accrerccie de recensor de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia del comencia del comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia del la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia del la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la come
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                       ccrerecceacrerecracerea da de caracteres de construcción de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constructor de constr
                                                                                                                                                                                                                                                                                                                                     snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA 300
                                                                                                                                                                                   roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                    a CCAGACTOGA GCAT CAGGGCCAAA GAGCAAA CT CAAGCTGCTGCACCTGGAGAAGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ctatatetécaaactiteaattiteteggecaactectggaetatgagaagaagattaaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TĠĀĀĠĀĠĠĀŤĠĠĀĊĀŤĠŤĊŤŤŤĀĠĀŤĠĀĀĠĊŤŦĀĊĀĠĀŤŤŤĠŤĠĀĀĀĞĀĀĀĀĀĀĀĀĠĀĊĊŤĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rrcragigeactgritaactgaatcicccccccccaccarcgrategerategeracatea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                réccereerredacaaricaerracarredagaaagcaaaaeccreccaaregarere
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Traficcccaagicricarrirectigegregiectigigaargacagerririggagaaaaanrir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsmIleGlyProThr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTCTAGTCCCTACCTGCATTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           criscaserses rices en contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra contra c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ĠAĊŦĠŦŦŦŦĊĬĊĀĊŦĠŦĀĊŦŦĊŦĠĠĠŦĀĀĀĊŦĠĠĀĠĀĀĠĀĠĊŦŦĊĀĀĊŦĊŦĠŦŦĊĀĊĊŦĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rdcadrcadaaddridradritaacdarcaaadcrcccaadardridccrcrcrcrcrcrca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | HisileLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
```

```
B
                                                                                                                                                                            $
                                                                                         RESULT 33
US-10-108-260A-2429
                                                                                                                                                                                                                                                             ફ
                                                                                                                                                                                                                                                                               음 성
                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                          ર્
                                                                                                                                                                                                                                                                                                                                                                                   र्
                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
   . . . . . . . . . . . .
                                                                                                                         밁
                                                                                                                                     ર્ક
                                                                                                                                                         밁
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
Sequence 2429, Application US/10108260A
Publication No. US20040005560A1
GENERAL INFORMATION:
APPLICATT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20040005560A1el full length
FILE REFERENCE: H1-A0106
CURRENT APPLICATION NUMBER: US/10/108,260A
CURRENT FILING DATE: 2002-03-27
NUMBER OF SEQ ID NOS: 5458
                                                                                                                                                                                                                                                                                                                             1730
                                                                                                                         2030
                                                                                                                                                               1970
                                                                                                                                                                                                       1910
                                                                                                                                                                                                                                               1850
                                                                                                                                                                                                                                                                                       1790
                                                                                                                                                                                                                                                                                                                                                                      1670
                                                                                                                                                                                                                                                                                                                                                                                                              1610
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1133
                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                            660
                                                                                                                                                                                   640
                                                                                                                                                                                                                           620
                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                         989
                                                                                                                                                                                                                                                                                                                                                 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                400
                                                                                                                                                                                                                                                                                     erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                  luIleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                    snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                 luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA
                                                                                                                                                                                                                                              rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                       laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                                                                                                                                                                     18SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                                                                                                                                                                                                                                                                                      lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        lnSerLygArgLeuHigSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                         AAATCATTGAGGTCTCC
                                                                                                                                                                AAAAGCAGTTTAAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGAGCATCATGTCAGAGA
                                                                                                                                                                                                                                                                                                                               CCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGCGCGCCCCCAGAGGTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           --,CC-AGCGTACCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGC
                                                                                                                         2046
                                                                                                                                           665
                                          CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1369
                                                                                                                                                                2029
                                                                                                                                                                                                        1969
                                                                                                                                                                                                                                               1909
                                                                                                                                                                                                                                                                                       1849
                                                                                                                                                                                                                                                                                                                               1789
                                                                                                                                                                                                                                                                                                                                                                       1729
                                                                                                                                                                                                                                                                                                                                                                                                              1669
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1249
                                                                                                                                                                                   660
                                                                                                                                                                                                                           640
                                                                                                                                                                                                                                                                  620
                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                  580
                                                                                                                                                                                                                                                                                                                                                                                         560
                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                         S
                                             뭐
                                                               S
                                                                                   片
                                                                                                        δ
                                                                                                                                 吊
                                                                                                                                              δ
                                                                                                                                                                    В
                                                                                                                                                                                      ঠ
                                                                                                                                                                                                          몽
                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: DNA
; ORGANISM: Homo
US-10-108-260A-2429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-029-345A-109 (1-665) x US-10-108-260A-2429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Patentin
SEQ ID NO 2429
LENGTH: 1916
                               646
                                                                                                                                                                                                                                   546
                                                                                                                                                                                                                                                         561
                                                                                                                                                                                                                                                                                                                                                                                                                         322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               142
                                                                                            801
                                                                                                              909
                                                                                                                                                     586
                                                                                                                                                                         681
                                                                                                                                                                                             566
                                                                                                                                                                                                                 621
                                                                                                                                                                                                                                                                                                 502
                                                                                                                                                                                                                                                                                                                    507
                                                                                                                                                                                                                                                                                                                                        442
                                                                                                                                                                                                                                                                                                                                                            487
                                                                                                                                                                                                                                                                                                                                                                                 382
                                                                                                                                                                                                                                                                                                                                                                                                   467
                                                                                                                                                                                                                                                                                                                                                                                                                                           447
                                                                                                                                                                                                                                                                                                                                                                                                                                                               262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           407
                                                                                                                                                                                                                                                                                                 GlySerValGluAspAsnTyrHisThrSerPheLeuPheGlyLeuSerThr-SerGlnGl
             uGlyLysValGlySerGlnSerSerPheSerGlySerMetGluIleIleGluValSer 665
                                                                                                                                                                                                                                                                                                                                        gSerCygGlnMetGluPheGlyGluSerIleMetSerGluAgnArgSerArgGluGluLe
                                                                                                                                                                                                                 oGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAlaThrGluSerSerHisPh
                                                                                            AGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAAAAAGCAGTTTAAACGCAG
                                                                                                    gAlaAspSerArgArgSerTrpHisGluGluSerProPheGluLysGlnPheLysArgAr
                                                                                                                                   GCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGGCAGAAGCCAAGTGACAG
                                                                                                                                              nLeuProThrCysGlyAspGlnValTyrSerValArgArgArgAlnLysProSerAspAr
                                                                                                                                                                        nHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHisSerAspIleLeuAlaPr
                                                                                                                                                                                                                                                                                                                                                                               ATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAGAGCAAGCGATTGCATTCG
                                                                                                                                                                                                                                                                                                                                                                                           | IleProLysLysLeuGlnThrAlaArgProSerAspSerGlnSerLysArgLeuHisSer
                                                                                                                                                                                                                                                                                                                                                                                                                         CCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCTGATAAGGAGGAAGCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                    ProValGlnGluLeuSerGluGlnThrProGluThrSerProAspLysGluGluAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                TIGGAATACTACAAACCTICCACTACTCIGGAIGGGACCAACAAGCTATGCCAGTTCICC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsnLysLeuCysGlnPheSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTCTCCTCATCAGAAGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPheSerSerSerGluAspAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2.86e-168
178.00
99.29%
99.29%
99.29%
26.77%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (1-1916)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1916
278
0
1
1
2
```

646 860 626 800 606 586

740

566

680

546

620

526

501

486

381 466 321 446

441

```
Sequence 10717, Application US/10357930

| Sequence 10717, Application US/10357930
| GENERAL INFORMATION: APPLICANT: Schlegel. Robert APPLICANT: Endege, Wilson APPLICANT: Endege, Wilson APPLICANT: Endege, Wilson APPLICANT: Endege, Wilson APPLICANT: Endege, Wilson APPLICANT: Endege, Wilson APPLICANT: Endege, Wilson ITITLE OF INVENTION: HOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION INVENTE CONFOCIATION, ASSESSMENT, PREVENTION, AND THER TITLE OF INVENTION NUMBER: 09/785,276

| PRIOR APPLICATION NUMBER: 09/785,276
| PRIOR APPLICATION NUMBER: 60/189,862
| PRIOR APPLICATION NUMBER: 60/207,454
| PRIOR FILING DATE: 2000-03-16
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR FILING DATE: 2000-05-25
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR FILING DATE: 2000-07-18
| PRIOR APPLICATION NUMBER: 60/219,007
| PRIOR APPLICATION NUMBER: 60/219,007
| PRIOR APPLICATION NUMBER: 60/255,281
| PRIOR APPLICATION NUMBER: 60/255,281
| PRIOR APPLICATION NUMBER: 60/255,281
| PRIOR FILING DATE: 2000-12-13
| NUMBER OF SEQ ID NOS: 62332
| SOFTWARE: FastSEQ for Windows Version 4.0
| SEQ ID NO 10717
| LENGTH: 425
                                                                          문
                                                                                                                                                  문
                                                                                                      Ś
                                                                                                                                                                                     S
                                                                                                                                                                                                                             뭐
                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-029-345A-109 (1-665) x US-10-357-930-10717 (1-425)
                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  i TYPE: DNA
i ORGANISM: Homo sapiens
US-10-357-930-10717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 34
US-10-357-930-10717/c
                                                                                                          340
                                                                                                                                                  183
                                  360
                                                                        123
                                                                                                                                                                                       320
                                                                                                                                                                                                                           243
                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                   303
                                                                                                                                                                                                                                                                                                                                                                                363
                                                                                                                                                                                                                                                                                                                                                                                                                                      63
                                                                                                                                                                                                                                                                                                                                          280
          ValProSerValProSerValGlnProSerLeuLeuGluAgpSerProLeuVal
                                                                              AsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerPro
                                                                                                                                  AATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGACGCCCCTCAGTCCA
                                                                                                                                                                                                             MetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro
                                                                                                                                                                                                                                   AsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysPro
                                                                                                                                                                                                                                                                                   actátatetecháactiteaattiteteggechactectegactátegagaagaagattaag
                                                                                                                                                                                                                                                                                                             ThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLys
                                                                                                                                                                                                                                                                                                                                                              ATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAAGAAAAAAAGACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.18e-128
138.00
100.00%
100.00%
20.75%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           425
138
0
0
                      377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FOR
THERAPY
                                                                                              359
                                                                                                                                  124
                                                                                                                                                                       339
                                                                                                                                                                                                                                               319
                                                        64
                                                                                                                                                                                                             184
                                                                                                                                                                                                                                                                                     244
                                                                                                                                                                                                                                                                                                                          299
                                                                                                                                                                                                                                                                                                                                                                304
                                                                                                                                                                                                                                                                                                                                                                                                                                          364
```

```
Sequence 31909, Application US/10357930

Publication No. US20040259086A1

GENERAL INFORMATION:
APPLICANT: Schlegel. Robert
APPLICANT: Endege, Wilson
APPLICANT: Endege, Wilson
ITITLE OF INVENTION: HOWEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HOWEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HUMAN PROSTATE CANCER
CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT APPLICATION NUMBER: 09/785,276

PRIOR APPLICATION NUMBER: 09/785,276

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/219,007

PRIOR APPLICATION NUMBER: 60/219,007

PRIOR APPLICATION NUMBER: 60/219,007

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281
                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-029-345A-109 (1-665) x US-10-357-930-31909 (1-467)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-357-930-31909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 35
US-10-357-930-31909/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
                                                                                                                                                                                                                        341
                                                                                                                                                                                                                                                                                                      225
                                                                                                                                                                                                                                                                                                                                                                                 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                261 LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        465 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260
ProSerValProSerValGlnProSerLeuGluAspSerProLeuVal
                                                                                                                rerecedent recent de la recentación de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia de la recedencia del 
                                                                                                                                                                  CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal
                                                                                                                                                                                                                                                                                                                       GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro|
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ĠĀĀĊĊĪĠŦĊĊĊĨĠĊĪĠŦĊŦĊĀĠĀĠĠĠĪĠĠĀĊĀĠĀĀĀĀĠĊĠĀĠĀĊĠĊĊĊĊŦĊĀĠŦĊĊĀĊĊĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGACTGGAGCATCAGGGCCAAAGAGCTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATATOTOCAAACTTOAATTTTOTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.3e-127
137.00
100.00%
100.00%
20.60%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            467
137
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           THERAPY OF
                                                                                                                        106
                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                    340
                                                                                                                                                                                                                                                                              166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             286
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             280
                                                                                                                                                                                                                                                                                                                                                                                                                                       226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  346
```

밁

CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTA 55

```
APPLICANY: Endege, Wilson

APPLICANY: Monahan, John

ITILE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR

ITITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THEF

ITILE OF INVENTION: HUMAN PROSTATE CANCER

FILE REFERENCE: MRI-007BCN

CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT FILING DATE: 2003-02-04

PRIOR APPLICATION NUMBER: 09/785,276

PRIOR FILING DATE: 2003-02-16

PRIOR FILING DATE: 2000-02-17

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/219,862

PRIOR PILING DATE: 2000-05-25

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR PILING DATE: 2000-05-07-18

PRIOR APPLICATION NUMBER: 60/255,021

PRIOR PILING DATE: 2000-07-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                     밁
                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                             ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                      밁
                                                                         S
                                                                                                                      밁
                                                                                                                                                    8
                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 36
US-10-357-930-40868/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-029-345A-109 (1-665) x US-10-357-930-40868 (1-467)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; ORGANISM: Homo sapiens
US-10-357-930-40868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 40868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 40868, Application US/10357930 Publication No. US20040259086A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILING DATE: 2000-12-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Schlegel. Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 467
                                                                                                                                                                                                                                                                                                                                                                                                                                165
                                                                           341
                                                                                                                      225
                                                                                                                                                        321
                                                                                                                                                                                               285
                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                             345 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                 281
                                                                                                                                                                                                                                                                                                                                                          405
361 ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuVal 377
                                                                                                                                                                                                                                                                                                                                                                                             261 LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                        GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn
                                                                                                                                            GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro
                                                                                                                                                                                                                                                                                                                                                          CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                             CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal
                                                                                                                      GAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                           IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                      TGTGCCGACTCTGCTACCTCAGAGGCAGCAGCACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.3e-127
137.00
100.00%
100.00%
20.60%
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    467
137
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              THERAPY
                                                                           360
                                      106
                                                                                                                    166
                                                                                                                                                        340
                                                                                                                                                                                               226
                                                                                                                                                                                                                                      320
                                                                                                                                                                                                                                                                             286
                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                        346
                                                                                                                                                                                                                                                                                                                                                                                             280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          260
                                                                                                                                                                                                                                                                                                                                                                                                                                    406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ę,
```

```
Sequence 41017, Application US/10357930

Publication No. US20040259086A1

GENERAL INFORMATION:
APPLICANT: Schlegel. Robert
APPLICANT: Schlegel. Robert
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
ITILE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF
ITILE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCR
CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT APPLICATION NUMBER: 003-02-04
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR FILING DATE: 2000-03-16
PRIOR PILING DATE: 2000-05-05
PRIOR PILING DATE: 2000-06-09
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
                                S
                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                             8
                                                                             문
                                                                                                                 S
                                                                                                                                                              문
                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-029-345A-109 (1-665) x US-10-357-930-41017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 37
US-10-357-930-41017/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-357-930-41017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: Fast
SEQ ID NO 41017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 467
                                      341
                                                                                                                      321
                                                                                                                                                                                                     301
165
                                                                                                                                                              285
                                                                                                                                                                                                                                              345
                                                                                                                                                                                                                                                                                                                               405
                                                                                                                                                                                                                                                                                                                                                                                                               465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             105 CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTA
                                                                                                                                                                                                                                                                                       281
                                                                                                                                                                                                                                                                                                                                                                                                                                                   241 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FastSEQ for Windows Version
                   CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal 360
                                                                                                    GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro
                                                                                                                                                                                                                                                                                                                                                       LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                             CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATC
                                                                                                                                                                                      GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn
                                                                                                                                                                                                                                                ÄTÄTCTCCÄAÄCTTCAÄTTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                        IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                             CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.3e-127
137.00
100.00%
100.00%
20.60%
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (1-467)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     467
137
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                55
                                                                               166
                                                                                                                      340
                                                                                                                                                              226
                                                                                                                                                                                                       320
                                                                                                                                                                                                                                                286
                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                             346
                                                                                                                                                                                                                                                                                                                                                                      280
                                                                                                                                                                                                                                                                                                                                                                                                             406
                                                                                                                                                                                                                                                                                                                                                                                                                                                     260
```

```
Sequence 10899, Application US/10357930

Publication No. US20040259086A1

GENERAL INFORMATION:

APPLICANT: Schlegel. Robert

APPLICANT: Echlege, Wilson

APPLICANT: Echlege, Wilson

APPLICANT: Monahan, John

ITITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THER

ITITLE OF INVENTION: HUMAN PROSTATE CANCER

FILE REFERENCE: MRI-007BCN

CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT FILING DATE: 2003-02-04

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR FILING DATE: 2000-05-25

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR FILING DATE: 2000-07-18

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281
                                     S
                                                                                                                   S
                                                                                                                                                               밁
                                                                                                                                                                                                  5
                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-029-345A-109 (1-665) x US-10-357-930-10898 (1-408)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-357-930-10898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 38
US-10-357-930-10898/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 10898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 408
108
                                     345
                                                                              168
                                                                                                                     325
                                                                                                                                                             228
                                                                                                                                                                                                      305
                                                                                                                                                                                                                                              288
                                                                                                                                                                                                                                                                                       285
                                                                                                                                                                                                                                                                                                                                348
                                                                                                                                                                                                                                                                                                                                           265 MetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThrIleSerProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                 408
                                                                                                                                                                                                                                                                                                                                                                                                                            245 LeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMetLysArgMetAsp
                                                                                AlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProProCysAlaAspSer
             AlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerValProSerValPro 364
                                                                                                                                             TCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAATGAACCTGTCCCT
                                                                                                                                                                        SerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsnGluProValPro 324
                                                                                                                                                                                                                              trcaattrectgggccaactcctggactatgagaagaagattaagaaccagactggagca
                                                                                                                                                                                                                                                           PheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsnGlnThrGlyAla 304
                                                                                                                                                                                                                                                                                                                 ATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAAAAAGACCTACTATATCTCCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                  TTAGCTGGGATCTCCCGCCCACCATCGCTATCGCCTACATCATGAAGAGGATGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.21e-123
133.00
100.00%
100.00%
100.00%
20.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  THERAPY OF
                                                                                                      344
                                                                                                                                                169
                                                                 109
                                                                                                                                                                                                                                   229
                                                                                                                                                                                                                                                                                                                 289
                                                                                                                                                                                                                                                                                                                                                         284
                                                                                                                                                                                                                                                                                                                                                                                                  349
                                                                                                                                                                                                                                                                                                                                                                                                                                           264
```

```
Sequence 3207//C
Sequence 3207//C
Sequence 3207/, Application US/10357930

| Publication No. US20040259086A1
| GENERAL INFORMATION: Schlegel. Robert
| APPLICANT: Schlegel. Robert
| APPLICANT: Schlegel. Robert
| APPLICANT: Monahan, John
| TITLE OF INVENTION: MOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HUMAN PROSTATE CANCER
| TITLE OF INVENTION: HUMAN PROSTATE CANCER
| FILE REFERENCE: MRI-007BCN CURRENT APPLICATION NUMBER: US/10/357,930
| CURRENT APPLICATION NUMBER: US/10/357,930
| CURRENT PILLING DATE: 2003-02-05
| PRIOR APPLICATION NUMBER: 60/183,319
| PRIOR APPLICATION NUMBER: 60/183,319
| PRIOR APPLICATION NUMBER: 60/183,319
| PRIOR FILLING DATE: 2000-03-16
| PRIOR APPLICATION NUMBER: 60/207,454
| PRIOR APPLICATION NUMBER: 60/207,454
| PRIOR APPLICATION NUMBER: 60/207,454
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
| PRIOR APPLICATION NUMBER: 60/211,314
                                                                                            뭐
                                                                                                                                   S
                                                                                                                                                                                        밁
                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                            뭉
                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-029-345A-109 (1-665) x US-10-357-930-32077 (1-438)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; ORGANISM: Homo sapiens
US-10-357-930-32077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 39
US-10-357-930-32077/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: FastSEQ for Windows Version SEQ ID NO 32077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 438
TYPE: DNA
                                          346
                                                                                            197
                                                                                                                                        326
                                                                                                                                                                                                                                       306
                                                                                                                                                                                          257
                                                                                                                                                                                                                                                                                            317
                                                                                                                                                                                                                                                                                                         286 AsnPheLeuGlyClnLeuLeuAspTyrCluLysLysIleLysAsnGlnThrGlyAlaSer 305
                                                                                                                                                                                                                                                                                                                                                                                                             266 SerLeuAspGluAlaTyrArgPheValLysGluLysArgProThrIleSerProAsnPhe 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 437 GCTGGGATCTCCCGCTCCGCCACCATCGCCTATCGCCTACATCATGAAGAGGATGGACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           246 AlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMetLysArgMetAspMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  365 SerValGlnProSerLeuLeuGluAspSerProLeuVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           48 AGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTA
ThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerValProSerValProSer
                                                                            GTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCTCAGTCCACCCTGTGCCGACTCTGCT
                                                                                                              ValSerGluGlyGlyGlnLysSerGluThrProLeuSerProProCysAlaAspSerAla
                                                                                                                                                                          GGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAATGAACCTGTCCCTGCT
                                                                                                                                                                                                       GlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsnGluProValProAla 325
                                                                                                                                                                                                                                                                            AATTTTCTGGGCCAACTCCTGGACTATGAGAAGAATTAAGAACCAGACTGGAGCATCA
                                                                                                                                                                                                                                                                                                                                                                             TCTTTAGATGAAGCTTĀCĀGĀTTTGTGĀĀĀGĀĀĀĀĀĀĀĀCCTĀCTĀTĀTĀTCTCCĀĀĀCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.3e-122
132.00
100.00%
100.00%
19.85%
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               132
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10
                                                                                                                                                                                198
                            365
                                                                              138
                                                                                                                                                                                                                                                                              258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                265
```

mis ruge Blank (uspto)